# TECHNICAL REPORT <br> PART I - SUMMATIVE ASSESSMENT 

# Ohio English Language Proficiency Assessment Listening, Reading, Speaking, and Writing 

## Grades K-12

2019-2020 Administration

## Submitted to:

Ohio Department of Education

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## Chapter 1. Introduction

The English Language Proficiency Assessment for the 21st Century (ELPA21) is a testing program supporting educators, member states, and members of the public as they implement the 2014 English Language Proficiency (ELP) Standards and college- and career-readiness standards. The ELPA21 Program, called the Program in this report, provides an assessment system that measures growth based on the 2014 ELP Standards and provides valuable information to inform instruction and facilitate the development of academic English proficiency so that all English learners (ELs) leave high school prepared for college and career success. The assessment system includes tests on listening, reading, speaking, and writing for students in kindergarten, grade 1 , grades $2-3$, grades $4-5$, grades $6-8$, and grades $9-12$. Ohio is a member of the ELPA21 Consortium, and the assessment is called the Ohio English Language Proficiency Assessment (OELPA).

The Program conducted test development and item development for the summative ELP assessment, as part of a U.S. Department of Education grant, commencing in 2013 and running through the first operational administration of the assessment in 2016. As part of the development process, Questar Assessment, Inc., built multiple fixed-length forms for each test. Items were field tested in spring 2015, and the first operational administration of ELPA21 was in spring 2016. Following this administration, the Center for Research on Evaluation, Standards and Student Testing (CRESST) conducted item analyses, held data review meetings, and performed item calibration to obtain scoring parameters. Pacific Metrics, the organization contracted for standard setting, held a standard-setting workshop in July 2016. Based on recommendations from the workshop, the Program made decisions with respect to domain cut scores that further translated into performance levels for each grade. Cambium Assessment, Inc. (CAI), used the final item parameters, cut scores, and proficiency definitions to score and reported the test results.

Details about test development, item development, field-test form building, item data review, item calibration, and standard setting can be found in their respective reports provided by the Program or the respective supporting vendors.

In 2017, the Program introduced the ELPA21 screener. The purpose of the screener is to identify students who should qualify for English language development services. It is an assessment of a student's language proficiency in the required domains of listening, reading, writing, and speaking. The screener test questions are drawn from the same item pools and are based on the same ELP Standards as the summative assessment. Ohio first administered the screener assessment in the 2018-2019 school year.

This technical report focuses on the 2019-2020 test administration, test form reliability and validity, scoring, reporting, and quality control. This technical report has two parts.

Part I includes chapters that delineate different aspects of the 2019-2020 administration of the summative assessment, including:

- Chapter 1. Introduction
- Chapter 2. Test Administration
- Chapter 3. Scoring
- Chapter 4. Standard Setting
- Chapter 5. 2019-2020 Summary
- Chapter 6. Reliability
- Chapter 7. Validity
- Chapter 8. Reporting
- Chapter 9. Quality Control
- Appendix Part I: Analysis for Summative Assessment-2019-2020 Summary

Part II includes chapters that delineate different aspects of the 2019-2020 administration of the screener assessment, including:

- Chapter 1. Introduction
- Chapter 2. Test Administration
- Chapter 3. 2019-2020 Summary
- Chapter 4. Reliability
- Chapter 5. Validity
- Chapter 6. Reporting
- Appendix Part II: Analysis for Screener Assessment-2019-2020 Summary


## Chapter 2. Test Administration

The 2019-2020 ELPA21assessments includes summative tests and screener tests. The ELPA21 screener test is used to identify students who should qualify for English language development services. Each of the summative and screener tests are administered to students in kindergarten, grade 1 , grades $2-3$, grades $4-5$, grades $6-8$, and grades $9-12$. The tests for kindergarten and grade 1 are grade-specific. The tests for grades 2 and above are grade-band tests. None of the tests are timed.

Each form of both assessments involves four domain tests. Students could be exempted from as many as three domain tests.

### 2.1 Testing Window

The 2019-2020 testing windows were scheduled from August 5, 2019, to June 30, 2020, for the screener assessment, and from February 2 to March 27, 2020, for the summative assessment. However, in March 2020, Ohio ordered school-building closure and passed subsequent emergency legislation addressing the coronavirus (COVID-19) pandemic-related issues (House Bill 197 of the $133^{\text {rd }}$ General Assembly). The Ohio General Assembly subsequently passed emergency legislation canceling the spring administration of Ohio's State Tests, including both OH ELPA summative and screener assessments ${ }^{1}$. Therefore, both test windows were halted as of March 17, 2020 , with the ordered school-building closure.

### 2.2 Summative Tests

The 2019-2020 summative assessment includes one online form, one paper form, and one braille form. Each form had separate tests for the four language domains. In addition to operational items, the online form consists of field-test (FT) items, which are embedded within each domain form. Each student took either one discrete item or the items in one entire passage in each domain. Each FT item/passage was randomly administered to students.

Table 2.1 through Table 2.3 list the number of operational items and score points in each online, paper-pencil, and braille form. The tables show that listening and reading have comparable numbers of items in each test. Writing and speaking have fewer but comparable numbers of items in each test. Table 2.4 lists the number of field-test items in the pool for each domain and grade and grade band.

[^0]Table 2.1 Number of Items and Score Points-Online Summative

|  | Grade/Grade Band |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| Domain | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score Points |
| Listening | 28 | 28 | 24 | 24 | 24 | 26 | 27 | 30 | 33 | 36 | 24 | 27 |
| Reading | 23 | 23 | 30 | 30 | 29 | 34 | 25 | 27 | 26 | 31 | 34 | 35 |
| Speaking | 11 | 27 | 9 | 25 | 9 | 25 | 8 | 30 | 7 | 27 | 7 | 27 |
| Writing | 18 | 18 | 20 | 20 | 14 | 24 | 13 | 30 | 8 | 28 | 8 | 28 |

Table 2.2 Number of Items and Score Points—Paper Summative

|  | Grade/Grade Band |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| Domain | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score <br> Points |
| Listening | 28 | 28 | 22 | 22 | 23 | 24 | 24 | 27 | 30 | 31 | 19 | 21 |
| Reading | 23 | 23 | 29 | 29 | 26 | 28 | 26 | 28 | 28 | 32 | 35 | 38 |
| Speaking | 11 | 27 | 9 | 25 | 9 | 25 | 8 | 30 | 7 | 27 | 7 | 27 |
| Writing | 11 | 18 | 9 | 16 | 10 | 20 | 10 | 27 | 8 | 28 | 8 | 28 |

Table 2.3 Number of Items and Score Points-Braille Summative

|  | Grade/Grade Band |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K |  | 1 |  | 2-3 |  | $4-5$ |  | $6-8$ |  | 9-12 |  |
| Domain | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score Points |
| Listening | 17 | 19 | 21 | 21 | 20 | 20 | 23 | 26 | 22 | 23 | 19 | 21 |
| Reading | 13 | 13 | 22 | 22 | 23 | 27 | 23 | 23 | 25 | 29 | 34 | 37 |
| Speaking | 4 | 12 | 7 | 17 | 8 | 20 | 7 | 25 | 6 | 22 | 5 | 19 |
| Writing | 10 | 23 | 7 | 19 | 9 | 24 | 10 | 30 | 8 | 28 | 8 | 28 |

Table 2.4 Number of Field-Test Items—Online Summative

| Domain | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Listening | 4 | 9 | 5 | 13 | 22 | 23 |
| Reading | 0 | 3 | 9 | 13 | 18 | 0 |
| Speaking | 0 | 8 | 6 | 0 | 8 | 5 |
| Writing | 0 | 9 | 10 | 7 | 15 | 10 |

### 2.3 Test Administration Mandal

### 2.3.1 Directions for Administration

For the 2019-2020 administrations, the Test Administration Manual (TAM) was developed to guide test administrators (TAs) in test administration for the summative test. The TAM usually includes the following key points:

- Overview of the OELPA summative assessment
- Test administrator qualifications
- Preliminary planning
- Materials required
- Administrative considerations
- Student preparation/guidance for practice tests
- Detailed instructions for preparing and administering the training tests and summative tests
- Test security instructions
- Contact information for user support


### 2.3.2 Training/Practice Tests

To help TAs and students familiarize themselves with the online registration system and the Test Delivery System, training or practice tests were provided before and during the testing windows. Training/practice tests can be accessed through a non-secure or CAI Secure Browser.

The summative training tests have two components, one for TAs to create and manage the training/practice test sessions and the other for students to take an actual training/practice test.

The Practice Test Administration site introduces TAs to

- logging in;
- starting a test session;
- providing the session ID to the students signing in to the TA session;
- monitoring students' progress throughout their tests; and
- stopping the test.

The Practice Tests site introduces students to

- signing in;
- verifying student information;
- selecting a test;
- waiting for the TA to check the test settings and approve participation;
- starting the test (adjusting the audio sound, checking the microphone for recording speaking responses, and reviewing test instructions);
- taking the test; and
- submitting the test.


### 2.3.3 Summative Tests

The instructions for summative tests include a brief direction for each domain test. They also provide the detailed instructions for

- logging in to the CAI Secure Browser;
- starting a test session;
- providing the session ID to the students;
- approving student test sessions, including reviewing and editing students' test settings and accommodations;
- monitoring students' progress throughout their tests by checking their testing statuses; and
- stopping the session and logging out.


## Chapter 3. Scoring

For summative tests, four domain scores and two composite scores are computed. The composite scores include a comprehension score for listening and reading and an overall score that comprises all four domains.

### 3.1 Estimating Student Ability for Summative Assessments

OELPA reported scale scores for each domain test, the overall scores for the whole test that includes four domains, and the comprehension scores for the partial test that includes reading and listening domains. Multidimensional item response theory (MIRT) is used to estimate domain scores. The bi-factor models are used to estimate the overall and comprehension scores. The details of score estimations can be found in the ELPA21 Scoring Specifications.

In addition, business rules were established to specify rules about domain exemptions and attemptedness at the item, domain, and test levels. The additional scoring rules for the 2019-2020 OELPA summative tests are outlined in the following section.

### 3.2 Scoring Rules for Summative Assessments

The scoring rules applied to the 2019-2020 OELPA scoring include the following:

1. A domain test is considered attempted when a student is presented with the first operational item; it is not necessary for a student to actually respond to at least one item.
2. If a domain test was attempted, the items without responses in that domain should be scored as 0 .
3. If a domain test was not attempted (no item responses in the domain) and the student was not marked as exempt in that domain, set the domain score and performance level to N (domain not-attempted).
4. If any domain tests are exempted before a student takes his or her first test, they should be left out of the computation of the overall scores. If the exempted domain test is reading or listening, the test should be left out of the computation of the comprehension score. In this case, set the score and performance level to E (domain exempted). However, if a test in an exempt domain is started in CAI's Test Delivery System (TDS), we will assume the test was not exempt.
5. If one or more of the domains is exempted and the other domains are not attempted, set the overall score to N .
6. For the comprehension score results, see Table 3.1 for scoring outcomes of various scenarios of exempted domains and non-attempted domains for listening and reading that contribute to the calculation of the comprehension score.

Table 3.1 Scoring Outcome for the Comprehension Score

| If Listening is... | and Reading is... | Comprehension is reported as: |
| :--- | :--- | :---: |
| Exempt | Exempt | E |
| Exempt | Not Attempted | N |
| Not Attempted | Exempt | N |
| Not Attempted | Not Attempted | N |

### 3.3 Theta to Scale Score Transformation

The student's performance is summarized in an individual domain score for each domain, a comprehension score that includes listening and reading, and an overall score that includes all four domains. Each theta score, obtained from the MIRT scoring model, is linearly transformed to a scale score using the formula $S S=a * \theta+b$, where $a$ is the slope and $b$ is the intercept. As decided in the 2016 standard-setting meeting, there is one set of scaling constants for the domain scores and another set of constants for the composite scores, as shown in Table 3.2. Scale scores are rounded to an integer.

Table 3.2 Scaling Constants on the Reporting Metric

| Subject | Grade | Slope (a) | Intercept (b) |
| :--- | :---: | :---: | :---: |
| Domain Scores (listening, reading, speaking, and <br> writing) | K-12 | 80 | 550 |
| Comprehension Scores | K-12 | 600 | 5500 |
| Overall Scores | K-12 | 600 | 5500 |

### 3.4 Lowest/Highest Obtainable Scores

ELPA21 does not assign fixed minimum or maximum obtainable scale scores. The minimum, mean, maximum, and standard deviation of scale scores by domain and by subgroup are presented in Section 1 of the appendix.

### 3.5 Handscoring

For OELPA summative tests, all items in speaking and some items in writing are handscored. Measurement Incorporated (MI) provides all handscoring except for screeners administered in Ohio, which are scored locally. The procedure for handscoring items is provided by the ELPA21 Program. Scoring rubrics and item content are reviewed by content experts as a part of the item review meetings. A key facet of reliability is whether scoring rules are applied with fidelity during scoring sessions.

### 3.5.1 Rules for Handscoring

The following rules are employed to handscore items in the summative assessment:

1. Each response is scored by at least one rater (R1). Of all responses, $20 \%$ receive a second reading for the purpose of monitoring and maintaining sufficient inter-rater reliability (R2).
2. Per ELPA21 request, any second reading whose score is non-adjacent to the first reading is resolved through a third read (R3).
3. The final score is reported as the R1 score, unless a second reading produces a non-adjacent score, in which case the final item score is reported as the R3 score.
4. All responses that are identified as non-scorable and assigned a condition code are routed for verification by a team leader or scoring director.

Table 3.3 presents the non-scorable condition codes for speaking and writing items. These codes apply to both the summative and screener assessments.

Table 3.3 Non-Scorable Condition Codes for Speaking and Writing Items

| Domain | Code | Description |
| :--- | :---: | :--- |
| Speaking | A | Blank |
| Writing | B | Technological Issue |
| Writing | A | Blank |

The following rules are followed when evaluating a potential non-scorable response in the speaking domain:

1. The 0 score point responses follow the list contained in the rubric.
2. If no words are spoken by the student, the response is assigned a blank.
3. A teacher voice is not necessarily interpreted as interference; if the teacher is heard telling the student to speak but not telling them what to say, the rater scores the student's response.
4. A student response of, "Yes, No, I don't know," is considered a refusal and should be scored a 0 .

## Chapter 4. Standard Setting

For the summative assessment, the domain cut scores and the overall proficiency levels were set through a standard-setting meeting convened by the ELPA21 Program on July 19-22, 2016. Details about the standard-setting process can be found in the ELPA21 standard-setting report.

Five performance levels were established for each domain. The cut scores were set by grade, as listed in Table 4.1. The four cut scores set for each domain identify students with five performance levels, levels $1-5$. If a student scores below the first cut, the student is classified in performance level 1. If a student scores at or above the first cut but below the second cut, the student is classified in performance level 2 . This pattern continues for performance levels 3 and 4 . If a student scores at or above the fourth cut, the student is classified in performance level 5.

Table 4.1 ELPA21 Domain Cut Scores by Grade

| Grade | Domain | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Grade | Domain | Cut 1 | Cut 2 | Cut 3 | Cut 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | Listening | 467 | 507 | 613 | 645 | 5 | Listening | 413 | 455 | 498 | 581 |
|  | Reading | 473 | 514 | 592 | 627 |  | Reading | 468 | 511 | 588 | 627 |
|  | Speaking | 487 | 535 | 598 | 625 |  | Speaking | 483 | 526 | 573 | 607 |
|  | Writing | 497 | 562 | 651 | 673 |  | Writing | 438 | 486 | 598 | 628 |
| 1 | Listening | 435 | 467 | 549 | 594 | 6 | Listening | 410 | 440 | 498 | 565 |
|  | Reading | 479 | 515 | 584 | 629 |  | Reading | 461 | 496 | 565 | 604 |
|  | Speaking | 528 | 577 | 593 | 619 |  | Speaking | 465 | 511 | 562 | 595 |
|  | Writing | 498 | 548 | 613 | 641 |  | Writing | 425 | 472 | 564 | 594 |
| 2 | Listening | 408 | 438 | 512 | 564 | 7 | Listening | 430 | 473 | 553 | 597 |
|  | Reading | 457 | 489 | 555 | 595 |  | Reading | 486 | 534 | 609 | 642 |
|  | Speaking | 490 | 529 | 555 | 588 |  | Speaking | 475 | 527 | 582 | 611 |
|  | Writing | 452 | 493 | 555 | 591 |  | Writing | 474 | 520 | 597 | 625 |
| 3 | Listening | 409 | 448 | 536 | 598 | 8 | Listening | 432 | 478 | 565 | 613 |
|  | Reading | 495 | 541 | 610 | 644 |  | Reading | 494 | 547 | 640 | 669 |
|  | Speaking | 500 | 538 | 572 | 612 |  | Speaking | 476 | 528 | 590 | 619 |
|  | Writing | 498 | 542 | 603 | 636 |  | Writing | 484 | 533 | 619 | 647 |
| 4 | Listening | 398 | 431 | 492 | 563 | 9-12 | Listening | 451 | 491 | 571 | 613 |
|  | Reading | 453 | 488 | 550 | 594 |  | Reading | 488 | 539 | 631 | 662 |
|  | Speaking | 462 | 506 | 544 | 584 |  | Speaking | 481 | 536 | 593 | 619 |
|  | Writing | 437 | 481 | 568 | 600 |  | Writing | 485 | 533 | 615 | 641 |

Overall proficiency, defined as "proficiency determination," for a given student is established on the basis of a profile of domain performance levels across all four tested domains. There are three proficiency determination levels: Emerging, Progressing, and Proficient. The following rules determine a student's overall proficiency (note that for the purpose of assigning overall proficiency, nonexempt domains that not attempted are treated as performance level 1 ):

- Students whose domain performance levels are 1 or 2 across all nonexempt domains are identified as Emerging.
- Students whose domain performance levels are 4 or 5 across all nonexempt domains are identified as Proficient. Students cannot be proficient if any domains are untested in the absence of a valid exemption or Invalidation.
- Students with domain performance levels that do not fit with Emerging or Proficient (as defined above) are identified as Progressing.

See details in the Appendix B (Overall Proficiency Determination Look-up Tables) in the ELPA21 Scoring Specification: School Year 2019-2020.

## Chapter 5. 2019-2020 Summary

The 2019-2020 student participation and performance statistics for OELPA summative assessment are presented in this chapter and in Sections 1-3 of the appendix. The figures and tables included in Sections 1-3 are listed below:

- Section 1. Summative Assessment-Scale Score Summary
- Tables S1.1-S1.13 present the number of students; the minimum, maximum, average, and standard deviation of domain, overall, and comprehension scores by subgroups in each grade ( $\mathrm{K}-12$ ).
- Section 2. Summative Assessment-Percentage of Students by Domain Performance Level
- Tables S2.1-S2.13 show the total number of students taking each domain test and the percentage of students in each performance level by domain test and by subgroups.
- Section 3. Summative Assessment—Percentage of Students by Overall Proficiency Level
- Tables S3.1-S3.13 show the total number of students who are categorized in each of the overall proficiency levels, by subgroup: Emerging, Progressing, or Proficient.


### 5.1 2019-2020 Student Participation

Table 5.1 summarizes student participation in each mode of testing. Five students tested with braille forms, 258 students tested with paper-pencil forms, and all other students tested with online forms.

Table 5.2 shows student participation overall and by subgroups. It shows the number of students in each subgroup who took a particular test. Generally, the number of students who participate in the 2019-2020 OELPA administration decreases as the grade level increases, with some fluctuation at grades 9 and 10 . More male students than female students take the test. By test, the greatest number of students are in the Hispanic or Latino group ( $26.8 \%-35.8 \%$ ), followed by African American students ( $18.3 \%-24.3 \%$ ) and Asian students ( $14.1 \%-24.9 \%$ ). About $0.2 \%-$ $0.7 \%$ of the students have migrated to the United States from other countries. The percentage of students who have individualized education programs (IEPs) increased from $5.1 \%$ to $19.5 \%$ between kindergarten and middle school, and it dropped to $14.3 \%$ in high school. Between kindergarten and middle school, the percentages of students with disabilities increased from 4.8\% to $19.4 \%$ and dropped to $14.4 \%$ in high school. Most students identified as having a speech or language impairment are in kindergarten ( $2.2 \%$ ) and grade $1(2.6 \%)$; while more students identified as having a specific learning disability are in upper grades, including: $4.5 \%$ in grade band $2-3,11.4 \%$ in grade band $4-5,12 \%$ in middle school, and $8.8 \%$ in high school.

Table 5.1 Student Participation by Test Mode

| Grade | Total | Braille |  | Online |  | Paper-Pencil |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | \% | N | \% | N | \% |
| K | 10,123 | 1 | 0.01 | 10,067 | 99.45 | 55 | 0.54 |
| 1 | 8,802 | 0 | 0.00 | 8,737 | 99.26 | 65 | 0.74 |
| 2 | 7,322 | 0 | 0.00 | 7,258 | 99.13 | 64 | 0.87 |
| 3 | 5,853 | 0 | 0.00 | 5,835 | 99.69 | 18 | 0.31 |
| 4 | 4,419 | 0 | 0.00 | 4,403 | 99.64 | 16 | 0.36 |
| 5 | 3,994 | 0 | 0.00 | 3,988 | 99.85 | 6 | 0.15 |
| 6 | 3,365 | 0 | 0.00 | 3,358 | 99.79 | 7 | 0.21 |
| 7 | 3,253 | 0 | 0.00 | 3,249 | 99.88 | 4 | 0.12 |
| 8 | 3,382 | 1 | 0.03 | 3,373 | 99.73 | 8 | 0.24 |
| 9 | 4,293 | 1 | 0.02 | 4,287 | 99.86 | 5 | 0.12 |
| 10 | 3,674 | 1 | 0.03 | 3,670 | 99.89 | 3 | 0.08 |
| 11 | 2,997 | 1 | 0.03 | 2,991 | 99.80 | 5 | 0.17 |
| 12 | 2,247 | 0 | 0.00 | 2,245 | 99.91 | 2 | 0.09 |
| Total | 63,724 | 5 | 0.01 | 63,461 | 99.59 | 258 | 0.40 |

Table 5.2 Student Participation by Subgroups in Each Test

| Subgroup | Status | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| Total |  | 10,123 | 100.0 | 8,802 | 100.0 | 13,175 | 100.0 | 8,413 | 100.0 | 10,000 | 100.0 | 13,211 | 100.0 |
| Grade | K | 10,123 | 100.0 |  |  |  |  |  |  |  |  |  |  |
|  | 1 |  |  | 8,802 | 100.0 |  |  |  |  |  |  |  |  |
|  | 2 |  |  |  |  | 7,322 | 55.6 |  |  |  |  |  |  |
|  | 3 |  |  |  |  | 5,853 | 44.4 |  |  |  |  |  |  |
|  | 4 |  |  |  |  |  |  | 4,419 | 52.5 |  |  |  |  |
|  | 5 |  |  |  |  |  |  | 3,994 | 47.5 |  |  |  |  |
|  | 6 |  | - |  |  |  |  |  |  | 3,365 | 33.7 |  |  |
|  | 7 |  | - |  |  |  |  |  |  | 3,253 | 32.5 |  |  |
|  | 8 |  |  |  |  |  |  |  |  | 3,382 | 33.8 |  |  |
|  | 9 |  |  |  |  |  |  |  |  |  |  | 4,293 | 32.5 |
|  | 10 |  |  |  |  |  |  |  |  |  |  | 3,674 | 27.8 |
|  | 11 |  |  |  |  |  |  |  |  |  |  | 2,997 | 22.7 |
|  | 12 |  |  |  |  |  |  |  |  |  |  | 2,247 | 17.0 |
| Gender | Female | 4,821 | 47.6 | 4,170 | 47.4 | 5,948 | 45.1 | 3,749 | 44.6 | 4,337 | 43.4 | 5,812 | 44.0 |
|  | Male | 5,110 | 50.5 | 4,512 | 51.3 | 7,106 | 53.9 | 4,558 | 54.2 | 5,582 | 55.8 | 7,308 | 55.3 |
|  | Missing | 192 | 1.9 | 120 | 1.4 | 121 | 0.9 | 106 | 1.3 | 81 | 0.8 | 91 | 0.7 |
| Ethnicity | American Indian or Alaskan Native | 19 | 0.2 | 29 | 0.3 | 28 | 0.2 | 19 | 0.2 | 19 | 0.2 | 23 | 0.2 |
|  | Asian | 2,519 | 24.9 | 2,028 | 23.0 | 2,475 | 18.8 | 1,246 | 14.8 | 1,412 | 14.1 | 2,157 | 16.3 |
|  | Black or African American | 1,904 | 18.8 | 1,610 | 18.3 | 2,622 | 19.9 | 1,626 | 19.3 | 2,060 | 20.6 | 3,207 | 24.3 |
|  | Hispanic or Latino | 2,715 | 26.8 | 2,550 | 29.0 | 4,166 | 31.6 | 3,010 | 35.8 | 3,533 | 35.3 | 4,243 | 32.1 |


| Subgroup | Status | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
|  | Native Hawaiian or Other Pacific Islander | 48 | 0.5 | 55 | 0.6 | 95 | 0.7 | 61 | 0.7 | 79 | 0.8 | 69 | 0.5 |
|  | Two or More Races | 1,269 | 12.5 | 1,090 | 12.4 | 1,843 | 14.0 | 1,316 | 15.6 | 1,625 | 16.3 | 1,990 | 15.1 |
|  | White | 1,618 | 16.0 | 1,410 | 16.0 | 1,916 | 14.5 | 1,119 | 13.3 | 1,257 | 12.6 | 1,491 | 11.3 |
|  | Other/Unknown | 31 | 0.3 | 30 | 0.3 | 30 | 0.2 | 16 | 0.2 | 15 | 0.2 | 31 | 0.2 |
| Other | Gifted | 2 | 0.0 | 23 | 0.3 | 67 | 0.5 | 34 | 0.4 | 24 | 0.2 | 16 | 0.1 |
|  | Home Schooled |  |  |  |  | 1 | 0.0 |  |  | 1 | 0.0 |  |  |
|  | IEP | 516 | 5.1 | 612 | 7.0 | 1,422 | 10.8 | 1,651 | 19.6 | 1,954 | 19.5 | 1,892 | 14.3 |
|  | Migrant | 18 | 0.2 | 22 | 0.2 | 50 | 0.4 | 36 | 0.4 | 44 | 0.4 | 86 | 0.7 |
| Primary Disability | Autism | 124 | 1.2 | 122 | 1.4 | 190 | 1.4 | 144 | 1.7 | 107 | 1.1 | 83 | 0.6 |
|  | Deaf-blindness |  |  |  |  |  |  | 1 | 0.0 |  |  | 3 | 0.0 |
|  | Developmental delay | 9 | 0.1 | 3 | 0.0 | 10 | 0.1 | 13 | 0.2 | 16 | 0.2 | 27 | 0.2 |
|  | Emotional disturbance | 7 | 0.1 | 14 | 0.2 | 27 | 0.2 | 27 | 0.3 | 40 | 0.4 | 40 | 0.3 |
|  | Hearing Impaired | 4 | 0.0 | 9 | 0.1 | 18 | 0.1 | 17 | 0.2 | 20 | 0.2 | 29 | 0.2 |
|  | Intellectual Disability | 25 | 0.2 | 33 | 0.4 | 82 | 0.6 | 116 | 1.4 | 174 | 1.7 | 179 | 1.4 |
|  | Multiple disabilities | 21 | 0.2 | 27 | 0.3 | 69 | 0.5 | 61 | 0.7 | 77 | 0.8 | 82 | 0.6 |
|  | Orthopedic impairment | 10 | 0.1 | 13 | 0.1 | 11 | 0.1 | 11 | 0.1 | 8 | 0.1 | 7 | 0.1 |
|  | Other health impairment | 41 | 0.4 | 68 | 0.8 | 188 | 1.4 | 205 | 2.4 | 257 | 2.6 | 237 | 1.8 |
|  | Specific learning disability | 35 | 0.3 | 86 | 1.0 | 589 | 4.5 | 958 | 11.4 | 1,200 | 12.0 | 1,157 | 8.8 |
|  | Speech or language impairment | 226 | 2.2 | 229 | 2.6 | 240 | 1.8 | 82 | 1.0 | 32 | 0.3 | 20 | 0.2 |


| Subgroup | Status | K |  |  | 1 |  |  | 2-3 |  |  | 4-5 |  |  | 6-8 |  |  | 9-12 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | \% | N |  | \% | N |  | \% | N |  | \% | N |  | \% | N |  | \% |
|  | Traumatic brain injury |  | 1 | 0.0 |  | 1 | 0.0 |  | 4 | 0.0 |  | 9 | 0.1 |  | 15 | 0.2 |  | 15 | 0.1 |
|  | Visual impairment |  | 5 | 0.0 |  | 2 | 0.0 |  | 3 | 0.0 |  | 7 | 0.1 |  | 7 | 0.1 |  | 12 | 0.1 |

### 5.2 2019-2020 Student Scale Score and Performance Summary

Student performance in the 2019-2020 OELPA administration is summarized for the entire population and by subgroup. Table 5.3 shows the number and percentage of students who had domain exemption or not-attempted in each domain and grade. Table 5.4 -Table 5.6 show the number of students; minimum, maximum, mean and standard deviation of scale scores in each grade and domain. The tests are not vertically linked across all grades. Scale scores can be compared only within grade-band tests ( $2-3,4-5,6-8$, and $9-12$ ). In general, the mean scale scores increase as grades increase within each grade band. A disaggregated summary based on gender, ethnicity, and other subgroups is also available in Section 1 of Appendix Part I.

Table 5.7 and Table 5.8 display the percentage of students in each performance level in each grade and domain (see Section 2 of Appendix Part I for a disaggregated summary). In addition, Table 5.9 shows the percentage of student in each overall proficiency level in each grade. The percentages of students by performance level in each domain test and by overall proficiency level are also plotted in Figure 5.1 and 5.2, respectively. Section 3 of Appendix Part I displays the percentage of students by proficiency level by gender, ethnicity, and other subgroups.

For both reading and writing, Figure 5.1 shows that most students are in performance level 3 except for kindergarten writing and grade 9 reading tests. In listening, speaking, and writing, the percentages of students in performance level 4 increase between kindergarten and grade 2 or grade 3 , remain stable up to grade 6 , drop up to grade 9 , and slightly increase again up to grade 11. More middle school and high school students earned performance level 1 or 2 than performance level 4 or 5 in reading and writing, while more grade 2 to grade 8 students earned performance level 4 or 5 than performance level 1 or 2 in listening and speaking.

Figure 5.2 shows that most students are in the Progressing category in all grades ( $63.6 \%$ to $77.3 \%$ ). The percentage of students who are proficient increases from kindergarten to grade 4 (with a slight drop in grade 3 ), then consistently decreases until grade 9 , and slightly increases after grade 9 . The percentage of students in the Emerging category is relatively stable until grade 6, increases until grade 9 , and then consistently drops afterwards.

Table 5.3 Summary of Domain Exemptions and Non-Attempted

| Grade | Total | Listening |  | Reading |  | Speaking |  | Writing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Exempted | Not Attempted | Exempted | Not Attempted | Exempted | Not Attempted | Exempted | Not Attempted |
| K | 10,123 | 2 (0.0\%) | 69 (0.7\%) | 39 (0.4\%) | 159 (1.6\%) | 39 (0.4\%) | 326 (3.2\%) | 43 (0.4\%) | 181 (1.8\%) |
| 1 | 8,802 | 4 (0.0\%) | 75 (0.9\%) | 63 (0.7\%) | 111 (1.3\%) | 61 (0.7\%) | 207 (2.4\%) | 63 (0.7\%) | 155 (1.8\%) |
| 2 | 7,322 | 3 (0.0\%) | 72 (1.0\%) | 71 (1.0\%) | 123 (1.7\%) | 63 (0.9\%) | 258 (3.5\%) | 64 (0.9\%) | 177 (2.4\%) |
| 3 | 5,853 | 4 (0.1\%) | 35 (0.6\%) | 79 (1.3\%) | 48 (0.8\%) | 64 (1.1\%) | 146 (2.5\%) | 75 (1.3\%) | 77 (1.3\%) |
| 4 | 4,419 | 4 (0.1\%) | 32 (0.7\%) | 73 (1.7\%) | 58 (1.3\%) | 50 (1.1\%) | 127 (2.9\%) | 68 (1.5\%) | 87 (2.0\%) |
| 5 | 3,994 | 7 (0.2\%) | 36 (0.9\%) | 94 (2.4\%) | 71 (1.8\%) | 69 (1.7\%) | 124 (3.1\%) | 88 (2.2\%) | 107 (2.7\%) |
| 6 | 3,365 | 3 (0.1\%) | 19 (0.6\%) | 68 (2.0\%) | 50 (1.5\%) | 42 (1.2\%) | 113 (3.4\%) | 60 (1.8\%) | 70 (2.1\%) |


| Grade | Total | Listening |  | Reading |  | Speaking |  | Writing |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Exempted | Not Attempted | Exempted | Not Attempted | Exempted | Not <br> Attempted | Exempted | Not Attempted |
| 7 | 3,253 | 4 (0.1\%) | 25 (0.8\%) | 35 (1.1\%) | 49 (1.5\%) | 28 (0.9\%) | 128 (3.9\%) | 30 (0.9\%) | 92 (2.8\%) |
| 8 | 3,382 | 8 (0.2\%) | 25 (0.7\%) | 51 (1.5\%) | 64 (1.9\%) | 27 (0.8\%) | 133 (3.9\%) | 45 (1.3\%) | 83 (2.5\%) |
| 9 | 4,293 | 14 (0.3\%) | 122 (2.8\%) | 29 (0.7\%) | 115 (2.7\%) | 23 (0.5\%) | 175 (4.1\%) | 35 (0.8\%) | 148 (3.4\%) |
| 10 | 3,674 | 7 (0.2\%) | 94 (2.6\%) | 43 (1.2\%) | 100 (2.7\%) | 27 (0.7\%) | 172 (4.7\%) | 41 (1.1\%) | 117 (3.2\%) |
| 11 | 2,997 | 11 (0.4\%) | 59 (2.0\%) | 27 (0.9\%) | 74 (2.5\%) | 22 (0.7\%) | 143 (4.8\%) | 26 (0.9\%) | 91 (3.0\%) |
| 12 | 2,247 | 2 (0.1\%) | 42 (1.9\%) | 21 (0.9\%) | 55 (2.4\%) | 15 (0.7\%) | 85 (3.8\%) | 20 (0.9\%) | 64 (2.8\%) |

* Proficiency Not Attempted is excluded.

Table 5.4 Scale Score Summary-Listening and Reading

| Grade | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| K | 10,052 | 237 | 561.6 | 775 | 78.3 | 9,925 | 247 | 561.6 | 770 | 77.4 |
| 1 | 8,723 | 239 | 559.1 | 712 | 72.8 | 8,628 | 241 | 554.6 | 744 | 79.3 |
| 2 | 7,247 | 272 | 525.2 | 726 | 65.8 | 7,128 | 260 | 525.0 | 744 | 66.9 |
| 3 | 5,814 | 229 | 547.2 | 742 | 71.9 | 5,726 | 228 | 554.7 | 766 | 72.1 |
| 4 | 4,383 | 213 | 526.8 | 717 | 76.4 | 4,288 | 228 | 523.6 | 719 | 68.7 |
| 5 | 3,951 | 213 | 538.1 | 718 | 82.6 | 3,829 | 228 | 539.9 | 719 | 73.4 |
| 6 | 3,343 | 232 | 520.7 | 721 | 72.0 | 3,247 | 247 | 522.1 | 743 | 63.8 |
| 7 | 3,224 | 261 | 526.2 | 723 | 78.1 | 3,169 | 263 | 529.5 | 736 | 69.1 |
| 8 | 3,349 | 232 | 546.2 | 755 | 85.1 | 3,267 | 247 | 551.5 | 780 | 77.7 |
| 9 | 4,157 | 253 | 520.7 | 762 | 78.5 | 4,149 | 258 | 520.8 | 777 | 71.0 |
| 10 | 3,573 | 310 | 537.5 | 736 | 76.0 | 3,531 | 318 | 537.8 | 742 | 70.7 |
| 11 | 2,927 | 289 | 549.8 | 741 | 71.2 | 2,896 | 325 | 547.4 | 755 | 68.9 |
| 12 | 2,203 | 253 | 554.4 | 809 | 71.4 | 2,171 | 258 | 551.9 | 817 | 70.1 |

* Domains with Exemption or Not Attempted are excluded.
* Scale scores cannot be compared across grade bands.

Table 5.5 Scale Score Summary-Speaking and Writing

| Grade | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| K | 9,758 | 291 | 587.2 | 756 | 82.6 | 9,899 | 309 | 543.7 | 723 | 78.7 |
| 1 | 8,534 | 265 | 584.7 | 736 | 71.4 | 8,584 | 245 | 552.7 | 733 | 82.3 |
| 2 | 7,001 | 267 | 550.4 | 735 | 70.8 | 7,081 | 267 | 523.4 | 723 | 69.5 |
| 3 | 5,643 | 252 | 573.7 | 747 | 75.3 | 5,701 | 235 | 554.1 | 765 | 72.6 |
| 4 | 4,242 | 237 | 547.0 | 723 | 78.8 | 4,264 | 221 | 519.9 | 722 | 75.4 |
| 5 | 3,801 | 237 | 557.3 | 742 | 82.5 | 3,799 | 221 | 536.5 | 724 | 79.5 |
| 6 | 3,210 | 268 | 550.7 | 745 | 72.9 | 3,235 | 243 | 514.4 | 725 | 72.3 |
| 7 | 3,097 | 278 | 551.5 | 739 | 81.1 | 3,131 | 260 | 521.7 | 748 | 80.9 |
| 8 | 3,222 | 268 | 567.8 | 766 | 83.3 | 3,254 | 243 | 542.1 | 776 | 86.7 |
| 9 | 4,095 | 297 | 545.4 | 723 | 78.2 | 4,110 | 263 | 511.8 | 749 | 81.1 |
| 10 | 3,475 | 329 | 563.0 | 719 | 69.4 | 3,516 | 326 | 531.3 | 729 | 74.7 |
| 11 | 2,832 | 324 | 574.7 | 735 | 64.3 | 2,880 | 292 | 543.1 | 712 | 69.7 |
| 12 | 2,147 | 297 | 580.6 | 770 | 61.3 | 2,163 | 263 | 546.8 | 808 | 67.3 |

[^1]Table 5.6 Scale Score Summary-Comprehension and Overall

| Grade | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| K | 10,090 | 3377 | 5560.2 | 6865 | 552.8 | 10,123 | 3185 | 5600.5 | 7178 | 581.1 |
| 1 | 8,758 | 3428 | 5538.4 | 6640 | 512.9 | 8,802 | 3021 | 5604.5 | 6998 | 582.9 |
| 2 | 7,282 | 3659 | 5306.3 | 6729 | 475.6 | 7,322 | 3294 | 5337.0 | 6977 | 526.7 |
| 3 | 5,837 | 3300 | 5488.1 | 6729 | 522.7 | 5,853 | 2968 | 5548.4 | 7156 | 571.7 |
| 4 | 4,402 | 3298 | 5317.0 | 6878 | 531.1 | 4,419 | 2892 | 5326.3 | 6800 | 582.8 |
| 5 | 3,965 | 3298 | 5411.3 | 6878 | 581.0 | 3,994 | 2892 | 5428.9 | 6774 | 626.7 |
| 6 | 3,358 | 3361 | 5286.8 | 6938 | 501.0 | 3,365 | 3052 | 5308.3 | 6932 | 546.7 |
| 7 | 3,238 | 3480 | 5334.6 | 6824 | 534.8 | 3,253 | 3171 | 5354.4 | 6865 | 601.3 |
| 8 | 3,366 | 3361 | 5489.2 | 6938 | 598.5 | 3,382 | 3052 | 5509.8 | 7242 | 648.7 |
| 9 | 4,221 | 3505 | 5295.9 | 7177 | 545.2 | 4,293 | 3235 | 5302.1 | 7064 | 598.4 |
| 10 | 3,617 | 3794 | 5411.8 | 7148 | 550.0 | 3,674 | 3696 | 5439.2 | 6900 | 562.9 |
| 11 | 2,957 | 3794 | 5490.6 | 7177 | 530.8 | 2,997 | 3568 | 5529.8 | 6981 | 529.4 |
| 12 | 2,223 | 3505 | 5528.6 | 7177 | 544.6 | 2,247 | 3235 | 5570.0 | 7483 | 521.2 |

* Scale scores cannot be compared across grade bands.

Table 5.7 Percentage of Students by Performance Level-Listening and Reading

| Grade | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| K | 10,052 | 11.8 | 13.1 | 48.3 | 11.5 | 15.2 | 9,925 | 13.3 | 14.0 | 36.7 | 14.8 | 21.2 |
| 1 | 8,723 | 5.8 | 6.2 | 28.1 | 25.4 | 34.5 | 8,628 | 18.4 | 16.8 | 30.1 | 14.1 | 20.5 |
| 2 | 7,247 | 6.2 | 4.3 | 25.8 | 34.5 | 29.3 | 7,128 | 17.6 | 14.6 | 31.7 | 20.0 | 16.1 |
| 3 | 5,814 | 6.5 | 3.9 | 24.5 | 41.0 | 24.1 | 5,726 | 21.4 | 15.1 | 39.4 | 15.5 | 8.6 |
| 4 | 4,383 | 7.6 | 5.7 | 14.9 | 35.3 | 36.4 | 4,288 | 18.0 | 12.6 | 31.0 | 22.0 | 16.5 |
| 5 | 3,951 | 10.5 | 7.0 | 10.1 | 37.6 | 34.9 | 3,829 | 18.7 | 14.7 | 37.6 | 17.0 | 12.0 |
| 6 | 3,343 | 8.9 | 6.8 | 18.4 | 35.4 | 30.5 | 3,247 | 17.8 | 17.9 | 38.1 | 15.2 | 11.1 |
| 7 | 3,224 | 15.5 | 8.7 | 32.9 | 23.8 | 19.1 | 3,169 | 27.5 | 24.3 | 34.4 | 9.0 | 4.8 |
| 8 | 3,349 | 13.9 | 9.2 | 27.7 | 24.7 | 24.5 | 3,267 | 26.8 | 19.3 | 39.9 | 8.4 | 5.6 |
| 9 | 4,157 | 23.5 | 12.5 | 33.4 | 17.9 | 12.7 | 4,149 | 35.9 | 24.1 | 33.4 | 4.0 | 2.7 |
| 10 | 3,573 | 15.6 | 13.2 | 33.2 | 20.0 | 18.0 | 3,531 | 28.2 | 22.7 | 38.1 | 6.5 | 4.6 |
| 11 | 2,927 | 9.8 | 11.3 | 37.1 | 20.7 | 21.0 | 2,896 | 20.9 | 26.7 | 39.2 | 7.8 | 5.4 |
| 12 | 2,203 | 8.7 | 10.7 | 35.9 | 21.4 | 23.3 | 2,171 | 20.0 | 25.2 | 39.4 | 9.0 | 6.4 |

* Domains with Exemption or Not Attempted are excluded.

Table 5.8 Percentage of Students by Performance Level-Speaking and Writing

| Grade | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| K | 9,758 | 11.8 | 9.7 | 26.2 | 16.0 | 36.3 | 9,899 | 34.2 | 25.8 | 27.9 | 4.9 | 7.2 |
| 1 | 8,534 | 16.4 | 22.2 | 10.2 | 18.3 | 32.9 | 8,584 | 23.4 | 20.5 | 32.3 | 9.6 | 14.2 |
| 2 | 7,001 | 14.7 | 15.9 | 15.8 | 22.6 | 31.0 | 7,081 | 16.1 | 14.7 | 33.0 | 19.9 | 16.3 |
| 3 | 5,643 | 12.7 | 9.8 | 15.9 | 28.8 | 32.8 | 5,701 | 20.0 | 15.5 | 37.4 | 17.7 | 9.4 |
| 4 | 4,242 | 13.4 | 8.7 | 14.5 | 26.9 | 36.4 | 4,264 | 15.7 | 10.2 | 46.2 | 15.9 | 12.1 |
| 5 | 3,801 | 15.6 | 9.4 | 22.1 | 24.1 | 28.7 | 3,799 | 13.3 | 9.7 | 54.8 | 12.1 | 10.2 |
| 6 | 3,210 | 12.8 | 9.7 | 26.2 | 23.1 | 28.2 | 3,235 | 12.8 | 10.4 | 52.0 | 14.2 | 10.7 |
| 7 | 3,097 | 16.5 | 11.5 | 30.6 | 19.4 | 22.1 | 3,131 | 23.4 | 17.2 | 43.4 | 9.4 | 6.5 |
| 8 | 3,222 | 14.9 | 10.0 | 27.2 | 18.9 | 29.1 | 3,254 | 22.5 | 16.3 | 42.8 | 10.0 | 8.4 |
| 9 | 4,095 | 20.1 | 16.3 | 32.6 | 15.4 | 15.6 | 4,110 | 32.5 | 20.5 | 39.5 | 5.3 | 2.2 |
| 10 | 3,475 | 12.1 | 16.8 | 34.1 | 15.5 | 21.4 | 3,516 | 25.3 | 20.7 | 42.0 | 7.4 | 4.6 |
| 11 | 2,832 | 8.0 | 14.0 | 34.2 | 18.6 | 25.2 | 2,880 | 18.0 | 22.0 | 45.8 | 8.1 | 6.0 |
| 12 | 2,147 | 6.1 | 12.9 | 33.9 | 19.2 | 27.8 | 2,163 | 16.3 | 22.1 | 45.5 | 9.8 | 6.3 |

* Domains with Exemption or Not Attempted are excluded.

Table 5.9 Percentage of Students by Overall Proficiency Level

| Grade | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: |
| K | 10,123 | 14.2 | 77.3 | 8.6 |
| 1 | 8,802 | 9.3 | 71.0 | 19.7 |
| 2 | 7,322 | 10.0 | 63.8 | 26.1 |
| 3 | 5,853 | 10.4 | 70.6 | 19.0 |
| 4 | 4,419 | 12.9 | 63.6 | 23.6 |
| 5 | 3,994 | 16.4 | 65.8 | 17.8 |
| 6 | 3,365 | 13.8 | 69.7 | 16.4 |
| 7 | 3,253 | 21.1 | 70.2 | 8.7 |
| 8 | 3,382 | 20.5 | 69.4 | 10.1 |
| 9 | 4,293 | 31.6 | 64.3 | 4.1 |
| 10 | 3,674 | 24.4 | 68.6 | 7.0 |
| 11 | 2,997 | 16.9 | 74.4 | 8.7 |
| 12 | 2,247 | 14.1 | 76.0 | 9.9 |

Figure 5.1 Percentage of Students in Performance Levels





| Level |  |  |  |
| :---: | :---: | :---: | :---: |
| $\rightarrow 1 \cdots 2 \cdots \cdots 3-\theta \cdots$ | $4-$ 日- 5 |  |  |

* Domains with Exemption or Not Attempted are excluded.

Figure 5.2 Percentage of Students in Proficiency Levels


### 5.3 2019-2020 Testing Time for Online Tests

Table 5.10 shows testing time per each grade or grade band. In general, higher-grade tests showed longer testing time than the lower grade. Testing time was computed based on page time for each item, which indicates the time a student spent on each item. The sum of the page time was used for testing time. In this analysis, only students who took online tests and had valid scores on all items were included.

Table 5.10 Testing Time for the 2019-2020 Online Summative Tests

| Grade/Grade Band | N | N of Items | Testing Time (Minutes) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Min | P10 | P25 | P50 | Mean | P75 | P90 | Max | SD |
| K | 9,550 | 94 | 10.7 | 40.7 | 47.1 | 56.6 | 60.0 | 69.0 | 83.4 | 209.9 | 18.2 |
| 1 | 8,334 | 86 | 6.0 | 43.0 | 49.0 | 57.6 | 60.8 | 69.0 | 82.2 | 191.8 | 17.1 |
| 2-3 | 12,344 | 78 | 10.2 | 54.2 | 64.1 | 77.5 | 82.4 | 95.1 | 116.3 | 432.0 | 27.8 |
| 4-5 | 7,817 | 76 | 5.5 | 61.1 | 74.6 | 93.4 | 101.4 | 118.1 | 149.2 | 433.9 | 40.4 |
| 6-8 | 9,238 | 74 | 6.6 | 69.7 | 88.6 | 116.6 | 131.4 | 157.6 | 212.3 | 675.2 | 63.3 |
| 9-12 | 12,089 | 73 | 4.1 | 69.0 | 92.8 | 128.7 | 141.7 | 174.4 | 230.1 | 658.1 | 70.1 |

## Chapter 6. Reliability

Reliability refers to consistency in test scores. Reliability can be defined as the degree to which individuals' deviation scores remain relatively consistent over repeated administrations of the same test or alternate test forms (Crocker \& Algina, 1986). For example, if a person takes the same or parallel tests repeatedly, he or she should receive consistent results. The reliability coefficient refers to the ratio of true score variance to observed score variance:

$$
\rho_{\mathrm{XX}}=\frac{\sigma_{\mathrm{T}}^{2}}{\sigma_{\mathrm{X}}^{2}}
$$

There are various approaches for estimating the reliability of scores. The conventional approaches used are characterized as follows:

- The test-retest method measures stability over time. With this method, the same test is administered twice to the same group at two different points in time. If test scores from the two administrations are highly correlated, then the test scores are deemed to have a high level of stability. For example, if the result is highly stable, those who scored high on the first administration tend to obtain a high score on the second administration. The critical factor, however, is the time interval. The time interval should not be too long, which could allow for changes in the test takers' true scores. Likewise, it should not be too short, in which case memory and practice may confound the results. The test-retest method is most effective for measuring constructs that are stable over time, such as intelligence or personality traits.
- The parallel-forms method is used for measuring equivalence. With this design, two parallel forms of the test are administered to the same group. This method requires two similar forms of a test. However, it is very difficult to create two strictly parallel forms. When this method is applied, the effects of memory or practice can be eliminated or reduced, since the tests are not purely identical as with the test-retest method. The reliability coefficient from this method indicates the degree to which the two tests are measuring the same construct. While there are a wide variety of possible items to administer to measure any particular construct, it is only feasible to administer a sample of items on any given test. If there is a high correlation between the scores of the two tests, then inferences regarding high reliability of scores can be substantiated. This method is commonly used to estimate the reliability of achievement or aptitude tests.
- The split-half method utilizes one test divided into two halves within a single test administration. It is crucial to make the two half-tests as parallel as possible, as the correlation between the two half-tests is used to estimate reliability of the whole test. In general, this method produces a coefficient that underestimates the reliability for the full test. To correct the estimate, the Spearman-Brown prophecy formula (Brown, 1910; Spearman, 1910) can be applied. While this method is convenient, varying splits of the items may yield different reliability estimates.
- The internal consistency method can be employed when it is not possible to conduct repeated test administrations. Whereas other methods often compute the correlation between two separate tests, this method considers each item within a test to be a one-item
test. There are several other statistical methods based on this idea: Coefficient alpha (Cronbach \& Chavelson, 2004), Kuder-Richardson Formula 20 (Kuder \& Richardson, 1937), Kuder-Richardson Formula 21 (Kuder \& Richardson, 1937), stratified coefficient alpha (Qualls, 1995), and Feldt-Raju coefficient (Feldt \& Qualls, 1996; Feldt \& Brennan, 1989).
- Inter-rater reliability is the extent to which two or more individuals (coders or raters) agree. Inter-rater reliability addresses the consistency of the implementation of a rating system.

Another way to view reliability is to consider its relationship with the standard errors of measurement (SEM) - the smaller the standard error, the higher the precision of the test scores. For example, classical test theory assumes that an observed score $(X)$ of each individual can be expressed as a true score $(T)$ plus some error $(E), X=T+E$. The variance of $X$ can be shown to be the sum of two orthogonal variance components:

$$
\sigma_{\mathrm{X}}^{2}=\sigma_{\mathrm{T}}^{2}+\sigma_{\mathrm{E}}^{2}
$$

Returning to the definition of reliability as the ratio of true score variance to observed score variance, we can arrive at:

$$
\rho_{\mathrm{XX}^{\prime}}=\frac{\sigma_{\mathrm{T}}^{2}}{\sigma_{\mathrm{T}}^{2}+\sigma_{\mathrm{E}}^{2}}=\frac{\sigma_{\mathrm{T}}^{2}}{\sigma_{\mathrm{X}}^{2}}=\frac{\sigma_{\mathrm{X}}^{2}-\sigma_{\mathrm{E}}^{2}}{\sigma_{\mathrm{X}}^{2}}=1-\frac{\sigma_{\mathrm{E}}^{2}}{\sigma_{\mathrm{X}}^{2}}
$$

As the fraction of error variance to observed score variance approaches 0 , the reliability then approaches 1 .

In contrast to the homoscedastic errors assumed in CTT, the SEMs in IRT vary over the ability continuum. These heterogeneous errors are a function of a test information function (TIF) that provides different information about test takers depending on their estimated abilities. Often, the TIF is maximized over an important performance cut, such as the proficient cut score.

Because the TIF indicates the amount of information provided by the test at different points along the ability scale, its inverse indicates the "lack" of information at different points along the ability scale. This lack of information is the uncertainty, or the SEM, of the score at various score points. Conventionally, fixed-form tests are maximized near the middle of the score distribution, or near an important classification cut, and have less information at the tails of the score distribution.

In this chapter, test reliability for the OLEPA summative tests is provided using

- Cronbach's alpha;
- marginal SEM;
- marginal reliability;
- conditional SEM;
- classification accuracy and consistency; and
- inter-rater analysis.

The following sections describe the methods used in the computation. The results for the 20192020 OELPA summative assessment are provided in this chapter and Sections 4-6 of Appendix Part I.

- Section 4. Summative Assessment-Marginal Reliability
- Figure S4.1 presents the marginal reliability by gender for each domain test across grades.
- Figure S4.2 presents the marginal reliability by ethnicity for each domain test across grades.
- Figures S4.3 and S4.4 present the marginal reliability by IEP and primary disability for each domain test across grades, respectively.
- Section 5. Summative Assessment-Conditional Standard Error of Measurement (CSEM)
- Figures S5.1-S5.13 show the CSEM plots for each domain, overall, and comprehension tests for each grade.
- Section 6. Summative Assessment-Inter-Rater Analysis
- Tables S6.1-6.6 display the inter-rater analysis result for each handscored item in each grade or grade band.


### 6.1 Internal Consistency

Cronbach's alpha (Cronbach \& Shavelson, 2004) is used to access the internal consistency of items in each test for each domain. In other words, Cronbach's alpha refers to the extent to which it is a consistent measure of a concept, in this case, each domain. A high Cronbach's alpha coefficient indicates that the items in the domain measure the same underlying concept (listening, reading, writing and speaking).

The paper-pencil and braille forms are excluded from the analysis due to their small size. Additionally, items with less than a $10 \%$ response rate are also excluded from the analysis.

Table 6.1 and Figure 6.1 show the result of analysis on Cronbach's alpha for each domain test. The Cronbach's alpha value for each domain was computed using the items from that domain. The reading domain in kindergarten has the lowest alpha coefficient, 0.77 . According to Nunnally (1978), 0.7 is the minimum acceptable alpha coefficient. All domain tests meet the minimum acceptable requirement.

Table 6.1 Cronbach's Alpha

| Grade | Listening | Reading | Speaking | Writing |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{K}$ | .82 | .77 | .89 | .92 |
| $\mathbf{1}$ | .80 | .87 | .81 | .93 |
| $\mathbf{2}$ | .82 | .82 | .82 | .84 |
| $\mathbf{3}$ | .85 | .84 | .84 | .86 |
| $\mathbf{4}$ | .86 | .84 | .87 | .86 |
| $\mathbf{5}$ | .88 | .85 | .88 | .87 |
| $\mathbf{6}$ | .91 | .81 | .85 | .89 |
| $\mathbf{7}$ | .92 | .82 | .86 | .90 |
| $\mathbf{8}$ | .93 | .86 | .86 | .91 |
| $\mathbf{9}$ | .89 | .82 | .89 | .89 |
| $\mathbf{1 0}$ | .88 | .84 | .85 | .87 |
| $\mathbf{1 1}$ | .86 | .84 | .82 | .84 |
| $\mathbf{1 2}$ | .85 | .80 | .83 |  |

Figure 6.1 Cronbach's Alpha by Domain


### 6.2 Marginal Standard Error of Measurement

Another way to examine score reliability is with the marginal standard error of measurement (MSEM), computed as the square root of $\bar{\sigma}_{\text {error }}^{2} . \bar{\sigma}_{\text {error }}^{2}$ came from the standard error of scale scores. A smaller value of MSEM indicates a greater accuracy of test scores. The marginal reliability $\bar{\rho}$ and the test MSEM behave oppositely: The higher the $\bar{\rho}\left(1-\frac{\bar{\sigma}_{\text {error }}^{2}}{\sigma_{\text {total }}^{2}}\right)$, the lower the MSEM and vice versa. The ratio of MSEM and the standard deviation of scale scores can also indicate the measurement errors. In other words, it shows the ratio of the error and total score $\left(\frac{\sigma_{\text {error }}}{\sigma_{\text {total }}}\right)$. The analysis for the ratio is displayed in Figure 6.2.

Figure 6.2 Ratio of Marginal Standard Error of Measurement to Standard Deviation of Estimated Scale Scores by Grade and Domain


* Domains with Exemption or Not Attempted are excluded.


### 6.3 Marginal Reliability and Conditional Standard Error of Measurement

Marginal reliability (Sireci, Thissen, \& Wainer, 1991) assesses the precision of scoring. It is based on the average of the conditional standard errors of measurement (CSEM) for the estimated theta scores. By definition, it is the proportion of true score variance among the observed score variance. While Cronbach's alpha was computed using item-level scores, marginal reliability was estimated by using expected a posteriori (EAP) estimates, which are used to estimate the domain scores. EAP is the estimate of true score, but its variance underestimates the true score variance, so the marginal reliability within domain can be estimated by

$$
\bar{\rho}=\left(\frac{\sigma_{E A P}^{2}}{\sigma_{\text {total }}^{2}}\right)=1-\frac{\bar{\sigma}_{\text {error }}^{2}}{\sigma_{\text {total }}^{2}}
$$

where $\bar{\sigma}_{\text {error }}^{2}$ is the average error variance (variance of the measurement error), $\sigma_{\text {total }}^{2}=\sigma_{E A P}^{2}+$ $\bar{\sigma}_{e r r o r}^{2}, \sigma_{E A P}^{2}$ is the variance of the EAP estimate.

The maximum value for the marginal reliability is 1 . A higher reliability coefficient indicates a greater precision of scoring. The marginal reliability for the 2019-2020 OELPA summative tests is presented in Table 6.2 and Figure 6.3. The marginal reliabilities by domain were obtained using the domain scores based on the MIRT models, and the overall/comprehension marginal reliabilities were obtained using the overall/comprehension scores based on the bi-factor models. The results show that the listening tests at grades $1-5$ have the lowest reliabilities, followed by the speaking tests. The reliability for the speaking domain in the middle and high school tests are lower than the other domains. All the reliability indices are above 0.8 , except for the listening and speaking tests in grade 1 . In addition, Section 4 of Appendix Part I presents marginal reliability by gender, ethnicity, IEP, and primary disability, and Section 5 displays CSEM plots by grades. Groups with fewer than 50 students were excluded from the plots of marginal reliability by groups.

Table 6.2 Marginal Reliability

| Grade | N | Listening | Reading | Speaking | Writing | Comprehension | Overall |
| :---: | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{K}$ | 9,616 | .86 | .84 | .89 | .89 | .81 | .82 |
| $\mathbf{1}$ | 8,403 | .76 | .90 | .79 | .88 | .69 | .83 |
| $\mathbf{2}$ | 6,870 | .81 | .90 | .83 | .90 | .75 | .86 |
| $\mathbf{3}$ | 5,558 | .81 | .89 | .84 | .90 | .77 | .87 |
| $\mathbf{4}$ | 4,150 | .87 | .90 | .87 | .91 | .82 | .89 |
| $\mathbf{5}$ | 3,693 | .88 | .90 | .88 | .91 | .84 | .90 |
| $\mathbf{6}$ | 3,120 | .90 | .88 | .87 | .90 | .84 | .88 |
| $\mathbf{7}$ | 3,008 | .91 | .90 | .89 | .92 | .86 | .90 |
| $\mathbf{8}$ | 3,132 | .91 | .91 | .89 | .92 | .87 | .91 |
| $\mathbf{9}$ | 3,930 | .92 | .91 | .90 | .92 | .89 | .90 |
| $\mathbf{1 0}$ | 3,347 | .91 | .90 | .87 | .91 | .88 | .89 |
| $\mathbf{1 1}$ | 2,749 | .90 | .90 | .85 | .89 | .87 | .87 |
| $\mathbf{1 2}$ | 2,082 | .89 | .90 | .83 | .88 | .87 | .87 |

* Domains with Exemption or Not Attempted are excluded.

Figure 6.3 Marginal Reliability by Test


* Domains with Exemption or Not Attempted are excluded.


### 6.4 Classification Accuracy and Consistency

When student performance is reported in terms of achievement levels, a reliability of achievement classification is computed in terms of the probabilities of consistent classification of students as specified in Standard 2.16 in the Standards for Educational and Psychological Testing (American Educational Research Association, American Psychological Association, \& National Council on Measurement in Education, 2014).

Classification accuracy (CA) analysis investigates how accurately students are classified into each performance level. The accuracy of proficiency classifications indicates the extent to which the proficiency classifications exactly agree with the classifications that might be made on examinees' true scores. The accuracy index is based on an estimated joint distribution of reported scores on the current form of the exam and the scores based on an all-forms average (true score).

Classification consistency (CC) analysis investigates how consistently students are classified into each performance level across two independent administrations of equivalent forms. The consistency of proficiency classifications indicates the extent to which the proficiency classifications exactly agree with the classification that might be made on an alternate version of the exam. The consistency index is based on an estimated joint distribution of scores on the
specified form of the exam and the scores on an alternate (parallel) form of the exam. Since obtaining test scores from two independent administrations is not feasible due to issues such as logistics and cost constraints, the CC index is computed with the assumption that the same test is independently administered twice to the same group of students. Classification consistency rates can be lower than classification accuracy because consistency is based on two tests with measurement errors, while accuracy is based on one test with a measurement error and the true score. The accuracy and consistency rates for each performance level are higher for the levels with smaller standard error

For OELPA, since the overall proficiency is based on domain performance level, the CA and CC are examined at each cut score in each domain test. Five performance levels divided by four cut scores, cuts $1-4$, are established for each domain test. Forms with an $n$ count fewer than 50 are excluded from the analysis; for this reason, the paper-pencil and braille forms are excluded. Four domain cut scores divided the scale range into five performance levels.

In general, we can estimate the CA and CC using the following approach.
At domain level 1 , we can estimate $p_{i l}$ for student $i$ as follows. Suppose the estimated ability of student $i \hat{\theta}_{i}$ with $\operatorname{se}\left(\hat{\theta}_{i}\right)$. Estimated plausible distribution for student $i$ 's true ability is $\theta_{i} \sim N\left(\hat{\theta}_{i}, \operatorname{se}\left(\hat{\theta}_{i}\right)\right) .$. The probability that the true score falls within performance level 1 based on the cut scores $c_{l-1}$ and $c_{l}$ is estimated as

$$
\begin{aligned}
p_{i l}=p\left(c_{l-1} \leq\right. & \left.\theta_{i}<c_{l}\right)=p\left(\frac{c_{l-1}-\widehat{\theta}_{i}}{\operatorname{se}\left(\widehat{\theta}_{i}\right)} \leq \frac{\theta_{i}-\widehat{\theta}_{i}}{\operatorname{se}\left(\widehat{\theta}_{i}\right)}<\frac{c_{l}-\widehat{\theta}_{i}}{\operatorname{se}\left(\widehat{\theta}_{i}\right)}\right)=p\left(\frac{\widehat{\theta}_{i}-c_{l}}{\operatorname{se}\left(\widehat{\theta}_{i}\right)}<\frac{\widehat{\theta}_{i}-\theta_{i}}{\operatorname{se}\left(\widehat{\theta}_{i}\right)} \leq \frac{\widehat{\theta}_{i}-c_{l-1}}{\operatorname{se}\left(\widehat{\theta}_{i}\right)}\right) \\
& =\Phi\left(\frac{\widehat{\theta}_{i}-c_{l-1}}{\operatorname{se}\left(\widehat{\theta}_{i}\right)}\right)-\Phi\left(\frac{\widehat{\theta}_{i}-c_{l}}{\operatorname{se}\left(\widehat{\theta}_{i}\right)}\right) .
\end{aligned}
$$

For level $1, c_{0}=-\infty$, and for level $L, c_{L}=\infty$. If scaled score is to be used, the above formula can be used based on the scale score distribution.

Let $p_{i l}$ be the probability of the true score at performance level 1 for the $i^{\text {th }}$ student, and define the following matrix based on L performance levels ( $L \times L$ matrix)

$$
\left(\begin{array}{ccc}
n_{a 11} & \cdots & n_{a 1 \mathrm{~m}} \\
\vdots & \vdots & \vdots \\
n_{a l 1} & \cdots & n_{a l m}
\end{array}\right)
$$

where $n_{a l m}$ is the sum of the probabilities for each expected performance level at each observed performance level (the level actually assigned). In the matrix, the row represents the observed level and the column represents the expected level.

Based on the above matrix, the CA for the cut $c_{l}(l=1, \cdots, L-1)$ is

$$
C A_{c_{l}}=\frac{\sum_{k, m=1}^{l} n_{a k m}+\sum_{k, m=l+1}^{L} n_{a k m}}{N}
$$

where $N$ is the total number of students.

The CA for a single cut, for example, the CA at cut 2, is the sum of the $n_{a l m}$ values in blue ( $\sum_{k, m=1}^{l} n_{a k m}$ ) assigned in the levels equal to or below cut 2 at both expected and observed levels and in green $\left(\sum_{k, m=l+1}^{L} n_{a k m}\right)$ assigned in the levels above cut 2 at both expected and observed levels divided by the total number of students.

$$
\left(\begin{array}{ccccc}
n_{a 11} & n_{a 12} & n_{a 13} & \cdots & n_{a 1 \mathrm{~L}} \\
n_{a 21} & n_{a 22} & n_{a 23} & \cdots & n_{a 2 \mathrm{~L}} \\
n_{a 31} & n_{a 32} & n_{a 33} & \cdots & n_{a 3 \mathrm{~L}} \\
\vdots & \vdots & \vdots & \vdots & \vdots \\
n_{a 51} & n_{a 52} & n_{a 53} & \cdots & n_{a 5 \mathrm{~L}}
\end{array}\right)
$$

For CC using $p_{i l}$, similar to CA, a similar $L \times L$ table is constructed by assuming the test is administered twice independently to the same student group,

$$
\left(\begin{array}{ccc}
n_{c 11} & \cdots & n_{c 1 L} \\
\vdots & \vdots & \vdots \\
n_{c L 1} & \cdots & n_{c L L}
\end{array}\right)
$$

where $n_{c l m}=\sum_{i=1}^{N} p_{i l} p_{i m}$ which is the sum of the probabilities multiplied by each paired combination of performance. $p_{i m}$ can be computed based on the same equation for $p_{i l}$ described above.

The CC for the cut $c_{l}(l=1, \cdots, L-1)$ is:

$$
C C_{c_{l}}=\frac{\sum_{k, m=1}^{l} n_{c k m}+\sum_{k, m=l+1}^{L} n_{c k m}}{N} .
$$

Similarly, we can estimate CC for a single cut.
The CA and CC indices are affected by the interaction of the magnitude of se $(\theta)$, the distance between adjacent cuts, the location of the cuts on the ability scale, and the proportion of students around a cut point. The larger the $\operatorname{se}(\theta)$, the closer the two adjacent cuts, and the greater the proportion of students around a cut point, the lower the indices.

Table 6.3 shows overall classification accuracy and consistency for domain performance levels, and the analysis results for each cut are presented in Table 6.4 and Figure 6.4 as well as Table 6.5 and Figure 6.5. For each cut, all CAs are above 0.8 and all CCs are above 0.75 . In listening and speaking, both indices for cut 3 and/or cut 4 are relatively lower in elementary and middle school grades, which indicates lack of difficult items.

The classification accuracy and consistency results for overall proficiency levels are summarized in Table 6.6 and Figure 6.6. All CAs and CCs are above 0.8 for overall and above 0.85 for each cut. The CC indices for cut 1 are higher than those for cut 2 in all grades except for grades 9 and 10.

Table 6.3 Summative Overall Classification Accuracy and Consistency for Domain Performance Levels, by Grade and Domain

| Grade | Accuracy |  |  |  | Consistency |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Listening | Reading | Speaking | Writing | Listening | Reading | Speaking | Writing |
| K | . 71 | . 66 | . 69 | . 76 | . 62 | . 57 | . 60 | . 68 |
| 1 | . 64 | . 72 | . 57 | . 69 | . 54 | . 63 | .49 | . 60 |
| 2 | . 67 | . 70 | . 58 | .70 | . 57 | . 60 | .49 | . 60 |
| 3 | . 67 | . 70 | . 59 | . 68 | . 57 | . 60 | . 50 | . 58 |
| 4 | . 74 | . 71 | . 65 | . 73 | . 64 | . 61 | . 55 | . 65 |
| 5 | . 74 | . 72 | . 63 | . 77 | . 65 | . 63 | . 54 | . 69 |
| 6 | . 77 | . 70 | . 64 | . 75 | . 68 | . 60 | . 54 | . 67 |
| 7 | . 73 | . 73 | . 65 | . 74 | . 64 | . 64 | . 55 | . 65 |
| 8 | . 74 | . 75 | . 67 | . 74 | . 65 | . 67 | . 58 | . 66 |
| 9 | . 74 | . 79 | . 67 | . 77 | . 65 | . 71 | . 58 | . 69 |
| 10 | . 73 | . 76 | . 66 | . 74 | . 63 | . 67 | . 55 | . 65 |
| 11 | . 73 | . 75 | . 64 | . 72 | . 64 | . 66 | . 55 | . 63 |
| 12 | . 72 | . 74 | . 64 | . 71 | . 63 | . 64 | . 54 | . 61 |

Table 6.4 Classification Accuracy for Each Cut

| Grade | Listening |  |  |  | Reading |  |  |  | Speaking |  |  |  | Writing |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 |
| K | . 95 | . 92 | . 89 | . 91 | . 95 | . 91 | . 88 | . 89 | . 97 | . 94 | 88 | . 87 | . 92 | . 93 | . 93 | . 94 |
| 1 | . 97 | . 95 | . 85 | . 83 | . 94 | . 93 | . 92 | . 93 | . 92 | . 84 | . 83 | . 83 | . 95 | . 89 | . 89 | . 91 |
| 2 | . 98 | . 97 | . 86 | . 85 | . 94 | . 93 | . 90 | . 92 | . 93 | . 87 | . 85 | . 85 | . 95 | . 92 | . 90 | . 91 |
| 3 | . 98 | . 98 | . 87 | . 84 | . 96 | . 92 | . 89 | . 93 | . 95 | . 91 | . 85 | . 83 | . 95 | . 91 | . 88 | . 92 |
| 4 | . 97 | . 97 | . 93 | . 87 | . 95 | . 93 | . 90 | . 92 | . 97 | . 93 | . 87 | . 84 | . 97 | . 94 | . 88 | . 92 |
| 5 | . 97 | . 96 | . 93 | . 87 | . 95 | . 93 | . 90 | . 92 | . 96 | . 92 | . 85 | . 85 | . 98 | . 95 | . 89 | . 93 |
| 6 | . 97 | . 97 | . 93 | . 89 | . 93 | . 90 | . 92 | . 94 | . 96 | . 93 | . 86 | . 86 | . 97 | . 95 | . 89 | . 93 |
| 7 | . 98 | . 96 | . 89 | . 90 | . 93 | . 91 | . 93 | . 96 | . 97 | . 92 | . 86 | . 88 | . 95 | . 91 | . 91 | . 95 |
| 8 | . 98 | . 97 | . 90 | . 88 | . 94 | . 93 | . 92 | . 95 | . 97 | . 94 | . 87 | . 87 | . 96 | . 92 | . 91 | . 94 |
| 9 | . 95 | . 95 | . 91 | . 93 | . 93 | . 92 | . 96 | . 98 | . 95 | . 92 | . 88 | . 90 | . 94 | . 91 | . 94 | . 97 |
| 10 | . 96 | . 94 | . 91 | . 92 | . 92 | . 92 | . 94 | . 96 | . 96 | . 91 | . 87 | . 88 | . 94 | . 91 | . 93 | . 95 |
| 11 | . 97 | . 95 | . 90 | . 91 | . 93 | . 91 | . 94 | . 96 | . 97 | . 92 | . 86 | . 87 | . 94 | . 90 | . 92 | . 95 |
| 12 | . 97 | . 94 | . 90 | . 90 | . 93 | . 92 | . 93 | . 95 | . 97 | . 92 | . 86 | . 86 | . 94 | . 90 | . 91 | . 94 |

* Cuts 1 to 4 fall between performance levels 1 and 2,2 and 3, 3 and 4, 4 and 5, respectively.

Figure 6.4 Domain Classification Accuracy


* Domains with Exemption or Not Attempted are excluded.
* Cuts 1 to 4 fall between performance levels 1 and 2, 2 and 3, 3 and 4, and 4 and 5, respectively.

Table 6.5 Classification Consistency for Each Cut

| Grade | Listening |  |  |  | Reading |  |  |  | Speaking |  |  |  | Writing |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 |
| K | . 93 | . 89 | . 85 | . 88 | . 93 | . 87 | . 83 | . 85 | . 96 | . 91 | . 83 | . 82 | . 89 | . 90 | . 91 | . 92 |
| 1 | . 96 | . 92 | . 79 | .77 | . 91 | . 90 | . 89 | . 90 | . 88 | . 78 | . 76 | . 77 | . 93 | . 85 | . 85 | . 88 |
| 2 | . 97 | . 95 | . 81 | . 80 | . 91 | . 90 | . 86 | . 89 | . 90 | . 82 | . 79 | . 79 | . 93 | . 89 | . 85 | . 88 |
| 3 | . 98 | . 96 | . 81 | . 79 | . 94 | . 88 | . 84 | . 90 | . 93 | . 86 | . 79 | . 77 | . 93 | . 88 | . 83 | . 89 |
| 4 | . 96 | . 95 | . 89 | . 82 | . 93 | . 91 | . 86 | . 89 | . 95 | . 90 | . 82 | . 78 | . 96 | . 92 | . 84 | . 89 |
| 5 | . 96 | . 95 | . 91 | . 82 | . 93 | . 90 | . 86 | . 89 | . 95 | . 89 | . 80 | . 79 | . 97 | . 93 | . 85 | . 90 |
| 6 | . 96 | . 96 | . 90 | . 85 | . 90 | . 86 | . 88 | . 92 | . 95 | . 89 | . 80 | . 81 | . 96 | . 92 | . 85 | . 90 |


| Grade | Listening |  |  |  | Reading |  |  |  | Speaking |  |  |  | Writing |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 |
| 7 | . 96 | . 94 | . 85 | . 86 | . 89 | . 87 | . 91 | . 94 | . 95 | . 88 | . 80 | . 83 | . 93 | . 87 | . 88 | . 93 |
| 8 | . 96 | . 96 | . 86 | . 84 | . 91 | . 89 | . 89 | . 93 | . 95 | . 91 | . 82 | . 82 | . 94 | . 89 | . 87 | . 91 |
| 9 | . 93 | . 92 | . 88 | . 90 | . 89 | . 89 | . 94 | . 97 | . 93 | . 88 | . 83 | . 86 | . 92 | . 87 | . 92 | . 96 |
| 10 | . 94 | . 92 | . 87 | . 88 | . 89 | . 88 | . 92 | . 95 | . 94 | . 88 | . 82 | . 84 | . 91 | . 87 | . 90 | . 94 |
| 11 | . 95 | . 92 | . 86 | . 87 | . 90 | . 87 | . 91 | . 94 | . 96 | . 88 | . 80 | . 82 | . 92 | . 86 | . 88 | . 93 |
| 12 | . 95 | . 92 | . 86 | . 86 | . 90 | . 88 | . 90 | . 93 | . 96 | . 88 | . 80 | . 81 | . 91 | . 86 | . 88 | . 92 |

* Cuts 1 to 4 fall between performance levels 1 and 2, 2 and 3,3 and 4, and 4 and 5, respectively.

Figure 6.5 Domain Classification Consistency


* Domains with Exemption or Not Attempted are excluded.
* Cuts 1 to 4 fall between performance levels 1 and 2, 2 and 3,3 and 4, and 4 and 5, respectively.

Table 6.6 Summative Classification for Proficiency Levels

| Grade | Accuracy |  |  | Consistency |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Overall | Cut 1 | Cut 2 | Overall | Cut 1 | Cut 2 |
| K | . 91 | . 96 | . 95 | . 89 | . 95 | . 94 |
| 1 | . 87 | . 97 | . 91 | . 84 | . 95 | . 89 |
| 2 | . 87 | . 97 | . 89 | . 84 | . 97 | . 87 |
| 3 | . 88 | . 98 | . 90 | . 85 | . 97 | . 87 |
| 4 | . 87 | . 97 | . 90 | . 83 | . 96 | . 87 |
| 5 | . 89 | . 98 | . 91 | . 85 | . 97 | . 89 |
| 6 | . 90 | . 97 | . 92 | . 87 | . 97 | . 90 |
| 7 | . 92 | . 97 | . 95 | . 89 | . 95 | . 94 |
| 8 | . 91 | . 97 | . 94 | . 88 | . 96 | . 92 |
| 9 | . 92 | . 95 | . 97 | . 90 | . 93 | . 96 |
| 10 | . 90 | . 95 | . 96 | . 87 | . 93 | . 94 |
| 11 | . 90 | . 96 | . 95 | . 87 | . 94 | . 93 |
| 12 | . 89 | . 95 | . 94 | . 86 | . 94 | . 93 |

Figure 6.6 Proficiency Classification


* Cut1: Cut between Emerging and Progressing; Cut2: Cut between Progressing and Proficient.


### 6.5 Inter-Rater Analysis

The fidelity of handscoring is monitored by having a subset of student responses independently scored by two raters. Each student response is scored holistically by a trained and qualified rater using the scoring criteria developed and approved by ELPA21, with a second read conducted on $20 \%$ of responses for the summative test for each task type. Responses are selected randomly for second readings and scored by raters who are not aware of the score assigned by the first rater or even that the response has been scored previously. The rater pool consists of teachers, test administrators, administrators, or other qualified staff.

In the 2019-2020 OELPA summative assessment, 11 handscored items in kindergarten, 9 handscored items in grade 1, and 13 handscored items in each of the other grade or grade-band online tests were scored by second raters. Twenty percent of handscores were monitored by second raters. In the screener assessment, OELPA utilized local TAs for scoring, and therefore, there were no second rater scores.

Handscorer score reliability is examined using Cohen's quadratic weighted Kappa coefficient. The coefficient allows differential weighting of disagreement and a measure of agreement corrected for chance. In addition, the frequencies and percentages of the exact match between first rater and second rater, the exact match plus $+1 /-1$ score differences, $+2 /-2$ and above differences are computed. Handscored items on paper and braille forms are not included in the results due to the small sample size.

Table 6.7 contains the summary of Kappa coefficients for each test. The table shows that $54.1 \%-$ $95.8 \%$ of handscores are consistent between the first rater and the second rater, and $0.2 \%-5.0 \%$ of handscores are off by two or more points across the six tests. The weighted Kappa coefficients range from 0.6362 to 0.9353 .

The inter-rater consistencies are also assessed by item and are summarized in Section 6 of Appendix Part I.

Table 6.7 Overall Inter-Rater Analysis

| Grade/Grade Band | Score Points | Number of Items | Weighted Kappa |  | \% Exact Agreement |  | \% within 1 Agreement |  | \% Not within 1 Agreement |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Min | Max | Min | Max | Min | Max | Min | Max |
| K | 2 | 6 | . 7846 | . 8610 | 79.6 | 95.0 | 97.5 | 99.7 | 0.3 | 2.5 |
|  | 3 | 5 | . 8099 | . 8630 | 70.2 | 73.7 | 98.7 | 99.2 | 0.8 | 1.3 |
| 1 | 2 | 5 | . 6362 | . 8722 | 82.3 | 95.8 | 98.1 | 99.8 | 0.2 | 1.9 |
|  | 3 | 2 | . 6593 | . 9133 | 72.3 | 87.1 | 97.7 | 99.8 | 0.2 | 2.3 |
|  | 4 | 1 | . 6803 | . 6803 | 63.9 | 63.9 | 96.8 | 96.8 | 3.2 | 3.2 |
|  | 5 | 1 | . 8370 | . 8370 | 56.4 | 56.4 | 95.9 | 95.9 | 4.1 | 4.1 |
| 2-3 | 2 | 5 | . 6894 | . 8236 | 86.9 | 93.9 | 99.2 | 99.8 | 0.2 | 0.8 |
|  | 3 | 4 | . 8178 | . 8634 | 71.8 | 82.2 | 98.7 | 99.3 | 0.7 | 1.3 |
|  | 4 | 3 | . 8261 | . 8623 | 69.2 | 73.2 | 95.2 | 99.6 | 0.4 | 4.8 |
|  | 5 | 1 | . 8410 | . 8410 | 63.8 | 63.8 | 97.0 | 97.0 | 3.0 | 3.0 |
| 4-5 | 3 | 8 | . 6788 | . 9353 | 67.8 | 92.4 | 98.0 | 99.7 | 0.3 | 2.0 |
|  | 4 | 1 | . 8127 | . 8127 | 63.5 | 63.5 | 96.4 | 96.4 | 3.6 | 3.6 |
|  | 5 | 4 | .7679 | . 8563 | 54.1 | 69.5 | 95.4 | 97.3 | 2.7 | 4.6 |
| 6-8 | 3 | 8 | . 7800 | . 8740 | 72.3 | 83.9 | 97.8 | 99.6 | 0.4 | 2.2 |
|  | 5 | 5 | . 8596 | . 9002 | 62.4 | 70.3 | 96.3 | 99.3 | 0.7 | 3.7 |
| 9-12 | 3 | 8 | . 7466 | . 8390 | 62.5 | 80.0 | 98.0 | 99.2 | 0.8 | 2.0 |
|  | 5 | 5 | . 8374 | . 8935 | 59.3 | 73.6 | 95.0 | 98.8 | 1.2 | 5.0 |

## Chapter 7. Validity

Validity refers to the degree to which "evidence and theory support the interpretations of test scores entailed by proposed uses of tests" (American Educational Research Association [AERA], American Psychological Association [APA], \& National Council on Measurement in Education [NCME], 2014). Messick (1989) defines validity as "an integrated evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of inferences and actions based on test scores and other modes of assessment." Both definitions emphasize evidence and theory to support inferences and interpretations of test scores. The Standards (AERA, APA, \& NCME, 2014) suggests five sources of validity evidence that can be used in evaluating a proposed interpretation of test scores. When validating test scores, these sources of evidence should be carefully considered.

The first source of evidence for validity is the relationship between the test content and the intended test construct. In order for test score inferences to support a validity claim, the items should be representative of the content domain, and the content domain should be relevant to the proposed interpretation of test scores. To determine content representativeness, diverse panels of content experts conduct alignment studies, in which experts review individual items and rate them based on how well they match the test specifications or cognitive skills required for a particular construct (discussions about test development, form construction, scaling, equating, and standard setting can be found in related ELPA21 documents). Test scores can be used to support an intended validity claim when they contain minimal construct irrelevant variance. For example, a mathematics item targeting a specific mathematics skill that requires advanced reading proficiency and vocabulary has a high level of construct-irrelevant variance. Thus, the intended construct of measurement is confounded, which impedes the validity of the test scores. Statistical analyses, such as factor analysis or multi-dimensional scaling of relevance, are also used to evaluate content relevance. Evidence based on test content is a crucial component of validity, because construct underrepresentation or irrelevancy could result in unfair advantages or disadvantages to one or more groups of test takers (see Section 7.1, Dimensionality Analysis).

The second source of evidence for validity is based on "the fit between the construct and the detailed nature of performance or response actually engaged in by examinees" (AERA, APA, \& NCME, 2014). This evidence is collected by surveying test takers about their performance strategies or responses to particular items. Because items are developed to measure particular constructs and intellectual processes, evidence that test takers have engaged in relevant performance strategies to correctly answer the items supports the validity of the test scores.

The third source of evidence for validity is based on internal structure: the degree to which the relationships among test items and test components relate to the construct on which the proposed test scores are interpreted. Differential item functioning, which determines whether particular items may function differently for subgroups of test takers, is one method for analyzing the internal structure of tests. Other possible analyses to examine internal structure are dimensionality assessment, goodness-of-model-fit to data, and reliability analysis (see Chapter 6, Reliability, for details).

A fourth source of evidence for validity is the relationship of test scores to external variables. The Standards (AERA, APA, \& NCME, 2014) divides this source of evidence into three parts: convergent and discriminant evidence, test-criterion relationships, and validity generalization.

Convergent evidence supports the relationship between the test and other measures intended to assess similar constructs. Conversely, discriminant evidence delineates the test from other measures intended to assess different constructs. To analyze both convergent and discriminant evidence, a multi-trait, multi-method matrix can be used. Additionally, test-criterion relationships indicate how accurately test scores predict criterion performance. The degree of accuracy mainly depends upon the purpose of the test, such as classification, diagnosis, or selection. Test-criterion evidence is also used to investigate predictions of favoring different groups. Due to construct underrepresentation or construct-irrelevant components, the relation of test scores to a relevant criterion may differ from one group to another. Furthermore, validity generalization is related to whether the evidence is situation-specific or can be generalized across different settings and times. For example, sampling errors or range restriction may need to be considered to determine whether the conclusions of a test can be assumed for the larger population.

The fifth source of evidence for validity is based on whether the intended and unintended consequences of the test use should be included in the test-validation process. Determining the validity of the test should depend upon evidence directly related to the test; this process should not be influenced by external factors. For example, if an employer administers a test to determine hiring rates for different groups of people, an unequal distribution of skills related to the measurement construct does not necessarily imply a lack of validity for the test. However, if the unequal distribution of scores is in fact due to an unintended, confounding aspect of the test, this would interfere with the test's validity. As described in this document, test use should align with the intended purpose of the test.

Supporting a validity argument requires multiple sources of validity evidence. This then allows for one to evaluate if sufficient evidence has been presented to support the intended uses and interpretations of the test scores. Thus, determining the validity of a test first requires an explicit statement regarding the intended uses of the test scores, and subsequently, evidence that the scores can be used to support these inferences. In this technical report, the standardized test administration can be found in Chapter 2, scoring in Chapter 3, reporting in Chapter 8, and quality control in Chapter 9.

In this chapter, validity for the summative assessment is measured by examining the internal structure of the items and the comparison of student abilities versus the difficulty of the items. The domain test internal structure is measured using domain dimensionality. The appropriateness of the assessment for the student population is assessed by comparing student abilities with test difficulties.

Additional results for assessing validity are summarized in the Sections 7-8 in Appendix Part I:

- Section 7. Summative Assessment-Dimensionality
- Figures S7.1-S7.6 present the scree plots for each domain test. If a test involves multiple forms, the plots are broken down by grade.
- Section 8. Summative Assessment—Ability vs. Difficulty
- Figures S8.1-S8.6 present the comparison of student ability vs. test difficulty on the logit scale for each domain test for each grade or grade band of students, respectively.


### 7.1 DIMENSIONALITY ANALYSIS

The graded response model (Samejima, 1969) used for operational scoring of ELPA21 assumes that the domain tests are essentially unidimensional. For OELPA, a principal component analysis (PCA) with an orthogonal rotation method (Jolliffe, 2002; Cook, Kallen, \& Amtmann, 2009) was used to investigate the dimensionality for each domain test.

The results are presented in the scree plots in Section 7 in Appendix Part I. The graphs show that the magnitude of the first eigenvalue is always noticeably larger than the magnitude of the second factor in all tests, which indicates that each domain test has one dominant factor, consistent with the assumption of essential unidimensionality within domains.

### 7.2 Student Abilities vs. Test Difficulties

When student abilities are well matched to test difficulties, the measurement errors are reduced. Therefore, it is desired that the test difficulty matches student ability. To examine this aspect of the test, domain difficulties were plotted versus student abilities.

The results are included in Section 8 in Appendix Part I. It shows that student abilities are generally higher than test difficulties in all domain tests, except the reading tests in grades 9-12, where the test difficulties match student abilities well.

## Chapter 8. Reporting

The OELPA results are available in the Online Reporting System (ORS) and ORS-generated paper family reports to be sent home with students.

### 8.1 Online Reporting System

The ORS generates a set of online score reports that includes reliable and valid information describing student performance for students, parents, educators, and other stakeholders for both summative and screener assessments. Because score reports on student performance are updated each time students complete tests, and those tests are handscored, authorized users (e.g., school principals, teachers) may view student performance on the tests and can use the results to improve student learning. In addition to the individual student's score report, the ORS produces aggregate score reports for teachers, schools, districts, and states. Additionally, the ORS provides participation data that help monitor the student participation rate.

Furthermore, to facilitate comparisons, each aggregate report contains summary results for the selected aggregate unit, as well as all aggregate units above the selected aggregate. For example, if a school is selected, the summary results of the district to which the school belongs and the summary results of the state are also provided so that school performance can be compared with district and state performance. If a teacher is selected, the summary results for the school, the district, and the state are also provided for comparison purposes. Table 8.1 shows the typical types of online reports and the levels at which they can be viewed (student, roster, teacher, school, and district).

Table 8.1 Types of Online Score Reports by Level of Aggregation

| Level of Aggregation | Types of Online Score Reports |
| :---: | :--- |
| State <br> District <br> School <br> Teacher <br> Roster | Number of students tested and percentage of students determined proficient (overall and <br> by subgroup) <br> Average overall and comprehension scale scores and standard errors of the average <br> scale scores (overall and by subgroup) <br> Percentage of students at each domain performance level (overall and by subgroup) <br> Average domain scale scores and the standard errors of average scale scores (overall <br> and by subgroup) <br> On-demand student roster report |
| Student | Overall and comprehension scale scores and standard errors of the scale scores <br> Proficiency status based on the domain performance levels <br> Domain scale scores with domain performance levels and level descriptors |

### 8.1.1 Types of Online Score Reports

The Online Reporting System (ORS) is designed to help educators, students, and parents answer questions regarding how well students have performed on the assessment for each domain. The

ORS is designed with great consideration for stakeholders who are not technical measurement experts (e.g., teachers, parents, students). It ensures that test results are easily readable. Simple language is used so that users can quickly understand assessment results and make valid inferences about student achievement. In addition, the ORS is designed to present student performance in a uniform format. For example, similar colors are used for groups of similar elements, such as achievement levels, throughout the design. This design strategy allows state-, district-, and schoollevel users to compare similar elements and to avoid comparing dissimilar elements.

Once authorized users $\log$ in to the ORS and select Score Reports, the online score reports are presented hierarchically. The ORS starts by presenting summaries on student performance by grade at a selected aggregate level. In order to view student performance for a specific aggregate unit, users can select the specific aggregate unit from a drop-down menu with a list of aggregate units (e.g., schools within a district or teachers within a school) to choose from. For more detailed student assessment results for a school, a teacher, and a roster, users can select the grade on the online score reports.

Generally, the ORS provides two categories of online score reports: aggregate score reports and student score reports. Table 8.1 summarizes the typical types of online score reports available at the aggregate level and the individual student level. Detailed information about the online score reports and instructions on how to navigate the online score reporting system can be found in the Online Reporting System User Guide. Figure 8.1 shows the online report for state overall performance, Figure 8.2 and Figure 8.3 show the online district report for overall performance and the domain performance, and Figure 8.4 shows the online student report.

Figure 8.1 ORS Page for State Overall Performance


Overall Performance on the OELPA test, by Grade: Ohio Department of Education, Spring2020
OELPA

| Grade | Number of Students Tested | Percent Determined Proficient |  |
| :---: | :---: | :---: | :---: |
| Kindergarten | 10121 |  | \% |
| Grade 1 | 8800 |  | \% |
| Grade 2 | 7321 |  | \% |
| Grade 3 | 5853 |  | \% |
| Grade 4 | 4418 |  | 4\% |
| Grade 5 | 3993 |  | \% |
| Grade 6 | 3364 |  | \% |
| Grade 7 | 3252 |  | \% |
| Grade 8 | 3381 |  | \% |
| Grade 9 | 4291 |  | \% |
| Grade 10 | 3671 |  | \% |
| Grade 11 | 2995 |  | \% |
| Grade 12 | 2247 |  | \% |

Based on data trom the OELPA, Spring2020 administration.
Ohio Department of Education
Report Generated: 7/15/2020 12:09:53 PM EDT
The number of students tested includes only those students with valid scores
${ }^{*}$ No valid scores for this grade and subject

Figure 8.2 ORS Page for District Overall Performance


Performance on the Kindergarten OELPA Test: Demo District, Spring2020
Breakdown by: All $\checkmark$ Comparison: ON

| Name | Number <br> of <br> Students | Average <br> Overall <br> Scale <br> Score | Average <br> Comprehension <br> Scale <br> Score | Percent <br> Determined <br> Proficient |
| :---: | :---: | :---: | :---: | :---: |
| Ohio Department of Education | 10121 | $5601 \pm 6$ | $5560 \pm 6$ | 9 |
| Demo District (999999) Q | 2 | $5542 \pm 132$ | $5605 \pm 215$ | 0 |
| Demo School 1 (999991) Q | 2 | $5542 \pm 132$ | $5605 \pm 215$ | 0 |

Ohio Department of Education
Report Generated 7/15/2020 12.44:30 PM EDT

Figure 8.3 ORS Page for District Domain Performance


Performance on the Kindergarten OELPA Test, by Domain: Demo District, Spring2020
Breakdown by: All $\checkmark$ Comparison: ON

| Name | Number <br> Students | Average Overall Scale Score | Average Comprehension Scale Score | Percent Determined Proficient | Domain | Average Domain Scale Score | Percentage in Performa | Each Doma nce Level |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ohio Department of Education | 10121 | $5601 \pm 6$ | $5560 \pm 6$ | 9 | Listening | $562 \pm 1$ | 121348 | 1115 |
|  |  |  |  |  | Reading | $562 \pm 1$ | 131437 | 1521 |
|  |  |  |  |  | Speaking | $587 \pm 1$ | 121026 | $16 \quad 36$ |
|  |  |  |  |  | Writing | $544 \pm 1$ |  | 7 |
| Demo District (999999) Q | 2 | $5542 \pm 132$ | $5605 \pm 215$ | 0 | Listening | $573 \pm 30$ | 100 |  |
|  |  |  |  |  | Reading | $551 \pm 21$ | 100 |  |
|  |  |  |  |  | Speaking | * | N/A |  |
|  |  |  |  |  | Writing | $542 \pm 0$ | 100 |  |
| Demo School 1 (999991) Q | 2 | $5542 \pm 132$ | $5605 \pm 215$ | 0 | Listening | $573 \pm 30$ | 100 |  |
|  |  |  |  |  | Reading | $551 \pm 21$ | 100 |  |
|  |  |  |  |  | Speaking | * | N/A |  |
|  |  |  |  |  | Writing | $542 \pm 0$ | 100 |  |
| 4 |  |  |  |  |  |  |  |  |

Based on data from the OELPA, Spring2020 administration. Ohio Department of Education

Report Generated: 7/15/2020 12:48:43 PM EDT

Figure 8.4 ORS Page for Student Report


Breakdown by: All $\checkmark$ Go
Average Scale Scores and Percent Determined Proficient on the Kindergarten OELPA Test: Demo Teacher and Comparison Groups, Spring2020

| Name | Percent <br> Determined <br> Proficient | Average <br> Overall <br> Scale <br> Score | Average <br> comprenension <br> Scale Score |
| :---: | :---: | :---: | :---: |
| Ohio Department of Education | 9 | $5601 \pm 6$ | $5560 \pm 6$ |
| Demo District(999999) Q | 0 | $5542 \pm 132$ | $5605 \pm 215$ |
| Demo school 1 (999991) Q | 0 | $5542 \pm 132$ | $5605 \pm 215$ |
| Demo Teacher Q | 0 | $5542 \pm 132$ | $5605 \pm 215$ |

Performance on the Kindergarten OELPA Test, by Student: Demo Teacher, Spring2020

| Name | SSID | Proficiency Status | Overall Scale Score | Comprehension Scale Score |
| :---: | :---: | :---: | :---: | :---: |
| Demo Student 1 Q | YQ9999999 | Progressing | $5674 \pm 297$ | $5819 \pm 283$ |
| Demo Student 2 Q | CG9999466 | Progressing | $5410 \pm 282$ | $5390 \pm 229$ |

### 8.1.2 Subgroup Reports

The aggregate score reports at a selected aggregate level are provided for students overall and by subgroup. Users can see student assessment results by any subgroup. Table 8.2 presents the typical subgroups and subgroup categories provided in the ORS. Figure 8.5 shows a mock-up for an online subgroup report.

Table 8.2 Types of Subgroups

| Breakdown by Category | Displayed Category |
| :--- | :--- |
| Ethnicity | Hispanic or Latino |
|  | American Indian or Alaska Native |
|  | Asian |
|  | Black or African American |
|  | White |


|  | Native Hawaiian or Other Pacific Islander |
| :---: | :---: |
|  | Two or More Races |
| Gender | Male |
|  | Female |
| Limited English Proficiency Status | Yes |
|  | No |
| IDEA Indicator | Yes |
|  | No |
| Enrolled Grade | Kindergarten |
|  | Grade 01 |
|  | Grade 02 |
|  | Grade 03 |
|  | Grade 04 |
|  | Grade 05 |
|  | Grade 06 |
|  | Grade 07 |
|  | Grade 08 |
|  | Grade 09 |
|  | Grade 10 |
|  | Grade 11 |
|  | Grade 12 |

Figure 8.5 ORS Page for Subgroup Report


Performance on the Kindergarten OELPA Test, by Gender: Demo District, Spring2020


Based on data from the OELPA, Spring2020 administration.
Ohio Department of Education
Report Generated: 7/15/2020 12:47:17 PM EDT

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### 8.2 PAPER REPORTS

The Online Reporting System (ORS) provides the functionality for users to print reports described earlier. The ORS also allows users to print the family report for each student. Figure 8.6 shows the mock-up of the individual student report.

Figure 8.6. Mock-Up for Individual Student Report


| Name | Percent Determined Proficient | Average Scale <br> score | Average Comprehension Scale Score |
| :---: | :---: | :---: | :---: |
| Ohio Department of Education | 9 | $5601 \pm 6$ | $5560 \pm 6$ |
| Demo District (999999) $\mathrm{Q}^{\text {a }}$ | 0 | $5542 \pm 132$ | $5605 \pm 215$ |
| Demo School 1 (999991) | 0 | $5542 \pm 132$ | $5605 \pm 215$ |
| Demo Teacher $\mathrm{Q}^{\text {, }}$ | 0 | $5542 \pm 132$ | $5605 \pm 215$ |

Information on Standard Error of Measurement
Proficiency Determination
Proficient - Students are Proficient when they attain a level of English language skill necessary to independently produce, interpret, collaborate on, and succeed in gradelevel content-related academic tasks in English. This is indicated on OELPA by attaining a profile of Level 4 or higher in all domains. Once Proficient on OELPA, students can be considered for reclassification.
Progressing - Students are Progressing when, with support, they approach a level of English language skill necessary to produce, interpret, and collaborate, on grade-level content-related academic tasks in English. This is indicated on OELPA by attaining a profile with one or more domain scores above Level 2 that does not meet the requirements to be Proficient. Students scoring Progressing on OELPA are eligible for ongoing program support.
Emerging - Students are Emerging when they have not yet attained a level of English language skill necessary to produce, interpret, and collaborate on grade-level content-related academic tasks in English. This is indicated on OELPA by attaining a profile of Levels 1 and 2 in all four domains. Students scoring Emerging on OELPA are eligible for ongoing program support.

Scale Scores
Scores from different domains have different ranges and should not be directly compared. The same, or similar, scale score on two or more domains might not result in the same performance level on these domains.

| Domain | Scale Score | Performance Level | Domain Description |
| :---: | :---: | :---: | :---: |
| Listening | $604 \pm 35$ | Level 3 | When listening, the student at Level 3 is working on: responding to conversations and identifying key words and phrases from read-alouds and oral presentations; answering questions about the meanings of words and phrases; making inferences and comparisons; responding to yes/no and wh- questions; comprehending details and following longer directions. |
| Reading | $573 \pm 35$ | Level 3 | When reading grade-appropriate text, the student at Level 3 is working on: identifying frequently used words and phrases; responding to questions about key details from read-alouds of texts and dialogues; responding to questions about familiar topics; answering questions to help determine the meaning of some words and phrases in read-alouds. |
| Speaking | Not Attempted | Not Attempted | N |
| Writing | $542 \pm 18$ | Level 2 | When writing, the student at Level 2 is working on: recognizing and using frequently occurring nouns and verbs in writing; writing and completing words by filling in a missing letter; expressing an opinion about a topic in writing and giving a reason for that opinion; responding to simple questions about familiar topics. |

A student's score is best interpreted when recognizing that the student's knowledge and skills fall within a score range and not just a precise number. For example, 630 $(+/-10)$ indicates a score range between 620 and 640 .

## Chapter 9. Quality Control

Thorough quality control has been integrated into every aspect of ELPA21 (including OELPA) summative and screener tests. ELPA21, the states (including Ohio Department of Education), Questar, CAI, and Measurement Incorporated (MI) have built in multiple layers of reviews and verifications to ensure that outputs are of the highest quality in areas such as materials prepared for item-writing workshops, test form constructions, test booklet development and printing, posttest score quality control processes, and reporting. Quality control for item-writing workshops, test form construction, and test booklet development and printing can be found in the related documents prepared by ELPA21 and associated vendors. This chapter describes the quality control procedures related to test administration, scoring, and reporting. The service was provided by CAI and MI.

### 9.1 Quality Control in Test Configuration

For online summative and screener testing, the test configuration files contain the complete information required for test administration and scoring, such as the test blueprint specifications, slopes and intercepts for theta-to-scale score transformation, cut scores, and item information (i.e., answer keys, item attributes, item parameters, passage information). The accuracy of the configuration file is checked and confirmed independently numerous times by multiple teams prior to the testing window. Scoring is also verified before the testing windows open.

### 9.1.1 Platform Review

CAI's online test delivery system supports a variety of item layouts for online test administration to many populations of students, including students who need designated supports and accommodations to test online. Each item on the assessment goes through an extensive platform device review on different operating systems, including Windows, Linux, and iOS, to ensure that the item displays consistently across all platforms. Some of the layouts have the stimulus and item response options/response area displayed side by side. In each of these layouts, both the stimulus and the response options have independent scroll bars.

Platform review is a process in which each item is checked to ensure that it is displayed appropriately (i.e., rendered) on each tested platform. A platform is a combination of a hardware device and an operating system. In recent years, the number of platforms has proliferated, and platform review now takes place on various platforms that are significantly different from one another.

Platform review is conducted by CAI's quality assurance team. The team leader projects every item from CAI's Item Tracking System (ITS ${ }^{2}$ ), and team members, each behind a different platform, look at the same item to ensure that it renders as expected.

[^2]
### 9.1.2 User Acceptance Testing and Final Review

Both internal and external user acceptance testing (UAT), usually the State's, were conducted before the testing window opened. Detailed protocols were developed for the review process of the Test Delivery System (TDS), and reviewers were given thorough instructions to note or report issues related to system functionality, item display, and scoring.

During the internal UAT, CAI staff took all OELPA online tests that covered the entire range of possibilities of item responses and the complete set of scoring rules in TDS. When issues were found, CAI took immediate actions to address them. The examples of issues identified and the actions taken during the internal UAT are presented below:

- Item layout issues: Some items were not rendering as anticipated in the TDS and the test was not moving. Item layouts were updated for these items to render correctly.
- Item drop-down zoom issue: A zoom issue with the Editing Task Choice (ETC: Student identifies an incorrect word or phrase and chooses the replacement from a number of options) items where the drop-down content was not enlarged was identified. The items were updated to support different zoom levels in the drop-down menus.
- Student eligibility issues: Braille eligibilities were not working as expected. Test IDs needed to be updated in TDS to resolve the issue.
- User eligibility issues: User eligibilities were not working as expected and they were updated based on State rules.
- Tool configuration issues: Some tools were not consistent across the tests and were updated based on State and ELPA21 guidelines.

When TDS was updated, the tests were administered again to ensure the issues were fixed. The process was repeated until all issues were resolved during the UAT period prior to operational testing.

State staff were also able to conduct a hands-on review of the system prior to the testing window opening. The states approved the TDS before the system was opened for testing.

Before the ORS opened, CAI and State staff conducted internal and external UAT of the system similar with that of TDS to ensure that the ORS would function as intended when opened to the public for score reporting.

### 9.2 Quality Assurance in Scoring

The quality assurance of scoring includes the assurance of the online data, the precision of handscoring, the correctness of machine scoring, and the strictness when applying the business rules in scoring. This section describes the details of scoring quality assurance.

The writing constructed-response items and speaking items were handscored by Measurement Incorporated (MI). For online tests, responses to the handscored items were transferred between CAI and MI on a rolling basis via Ledger. ${ }^{3}$ Therefore, as soon as a student submitted a test to TDS,

[^3]the responses to handscored items were transformed into XLM format, and were then sent to Ledger, from which MI retrieved responses for handscoring. When scoring was complete, the record was sent to Ledger, from which CAI downloaded the record for final scoring. The data transmission process was automatic.

For paper-pencil tests, after test administration, student responses were entered into the CAI Data Entry Interface (DEI) on the state testing portal for all ELPA21 domain tests, with the exception of writing constructed-response items. The item responses of the writing constructed-response items were mailed to MI for scoring via secure shipping. After scoring, MI transmitted the scores to the Ledger system, from which CAI retrieved the item scores for final scoring. To answer speaking items, students who took paper-pencil tests spoke into the DEI directly, and the item responses followed the online procedure for scoring.

For braille tests, item responses were entered into the braille DEI by test administrators. The data were processed following the online data processing procedure, and the secure testing materials were returned to the scoring vendor, MI.

### 9.2.1 Quality Assurance in Online Data

CAI's TDS has a real-time, built-in quality monitoring component. After a test is administered to a student, TDS passes the resulting data to our quality assurance (QA) system. QA conducts a series of data integrity checks, ensuring, for example, that the record for each test contains information for each item, keys for multiple-choice items, score points in each item, and total number of items, and that the test record contains no data from items that have been invalidated.

Data pass directly from the Quality Monitoring System $\left(\mathrm{QMS}^{4}\right)$ to the Database of Record (DoR), which serves as the repository for all test information and from which all test information for reporting is pulled. The Data Extract Generator (DEG) is the tool that is used to pull data from the DoR for delivery to each state. CAI staff ensure that data in the extracted files match the DoR prior to delivery to the state.

### 9.2.2 Quality Assurance in Handscoring

MI's scoring process is designed to employ a high level of quality control. The quality control procedures are implemented at each stage of the scoring process, which includes scorer recruitment, leader recruitment, training, and various reports that help to ensure scoring quality.

## Scorer Recruitment/Qualifications

MI retains scorers who have years of experience in handscoring, and those scorers made up approximately $65 \%$ of the scorer pool. To complete the scorer staffing for this project, MI placed advertisements on various job boards, in local papers, in publications, and at regional colleges and universities. Recruiting events were held, and applications for scorer positions were screened by MI recruiting staff. Candidates were personally interviewed, and references and proof of a four-year college degree were collected. Candidates completed placement tests for English language arts (ELA; reading and writing) and mathematics. In this screening process, preference

[^4]was given to candidates with previous experience scoring large-scale assessments. The scorer pool consisted of educators, writers, editors, and other professionals who were valued for their experience, but who were also required to set aside their own biases about student performance and accept the scoring standards.

## Leadership Recruitment/Qualifications

Scoring directors and team leaders had experience as successful scorers and leaders on previous MI projects and had strong backgrounds in scoring content-specific projects. These individuals demonstrated strong organizational, leadership, and management skills. All scoring directors, team leaders, and scorers were required to sign confidentiality agreements prior to training with ELPA21 materials or handling secure materials.

Each room of scorers was assigned a scoring director or assistant scoring director. This individual led the handscoring for the duration of the project and was monitored by the scoring project manager. The scoring director conducted the team leader training and was responsible for training the scorers.

In general, team leaders assisted the scoring directors/assistant scoring directors with scorer training and monitoring by working with their teams in small group discussions and answering individual questions that scorers may not have felt comfortable asking in a large group. Once scorers were qualified, the team leaders were responsible for maintaining the accuracy and workload of team members. The ongoing monitoring identified those scorers who were having difficulty scoring and resulted in individual scorers receiving one-on-one retraining. If this process did not correct inaccuracies in scoring, individual scorers were released from the project.

## Training

In range finding meetings, the full range of responses that represent each score point and produce scoring training materials including qualification, anchor, practice, and validity sets, were identified. The range finding process first involved MI review and selection of responses for range finding. During range finding, participants reviewed items and rubrics; iteratively score, discuss, and reach consensus on responses; and identify which ones to use as anchor and training responses.

To train ELPA21 scorers, MI scoring staff used approved rubrics and training materials. The training materials were composed of anchor, qualifying, and training responses provided by the ELPA21 Program. Training materials included a comprehensive annotated scoring guide for each item. The guide contained the anchor set scorers referenced while evaluating live student responses. The scoring guides also contained several typical student responses presented in score point order.

Guides included detailed annotations explaining how the scoring criteria applied to each response's specific features and why the response merited a particular score. Guides included responses that were the most useful in making scoring decisions, including some that fell within the upper and lower ranges of the score point to help scorers define the lines between score points.

Anchor and qualifying sets were designed to help the scorers learn to apply the criteria illustrated in the scoring guide, ensure that they become familiar with the process of scoring student responses, and assess the scorers' understanding of the ELPA21 scoring criteria before they were allowed to begin live scoring.

The item-specific rubrics served as the scorers' constant reference. Scorers were instructed on how to apply the rubrics and were required to demonstrate a clear comprehension of each anchor set by performing well on the training materials that were presented for each grade and item.

Team leaders assisted the scoring directors with the training and monitoring of scorers. The scoring director conducted the team leader training before the scorer training. This training followed much of the same process as the scorer training, but additional time was allotted for review, discussion, and addressing anticipated scorer questions and concerns. To facilitate scoring consistency, it was imperative that each team leader imparted the same rationale for each response that other team leaders used. Once team leaders qualified, leadership responsibilities were reviewed and team assignments were given. A ratio of one team leader for $8-10$ scorers ensured adequate monitoring of the scorers.

Scorer training involved an intensive review of the rubric and anchor responses, provided by the scoring director, to help the scorers internalize the scoring criteria. The scoring director and team leaders led a thorough discussion of the training materials with the entire group. All responses were discussed using the annotations from range finding. A similar process was followed in training for writing and speaking items.

Once the scoring guidelines were discussed, scorers were required to apply the scoring criteria by qualifying (i.e., scoring with acceptable agreement to the "true" scores decided upon at range finding) on at least one of the qualifying sets. Scorers who failed to achieve the qualifying criteria were given additional training. Scorers who did not perform at the required level of agreement for a given item or related group of items by the end of the qualifying process were not permitted to score live student work. The required level at the end of the qualifying process are the qualifying sets in which the reader has to score a $70 \%$ or higher with no non-adjacent scores.

Training was an ongoing process that did not end after the qualifying rounds. Feedback was an integral part of several reliability checks that were performed throughout the project. Primarily, team leaders monitored scorers' reliability by conducting read-behinds/listen-behinds on an asneeded basis. When live scoring begins, one of the team leader's primary jobs is to do read-behinds for their team members to ensure that they are scoring accurately. As this process continues, the team leader can start to recognize if the individual readers have a firm grasp of the criteria for the particular task type that is being scored or who may need some additional coaching. Once this is established using the read-behinds, the reader's notes that are sent for score clarifications, and reader reliability reports, the team leader can determine who needs less read-behinds or who needs more monitoring. This was a process whereby team leaders reread or re-listened to the responses and checked the scores of each scorer on their team to catch potential scorer drift (shifts in scoring over time) so that the scorer could have immediate feedback and be retrained in a timely fashion. The percentage of read-behinds/listen-behinds conducted for an individual scorer was not fixed but varied based on current levels of performance. Scorers were removed from scoring an item or a related group of items if they were unable to score consistently with the rubric and the anchor responses after retraining. The scores were reset so the items would be scored correctly by other scorers.

Development and range finding of the materials used with the 2017 administration were completed by a previous vendor. For 2019-2020, a field-test score validation of the new short response speaking items was conducted by MI. This information is available from the Program.

### 9.2.3 Handscoring Quality Assurance Monitoring Reports

Measurement Incorporated (MI) scorer accuracy was monitored throughout the scoring sessions by producing real-time, on-demand reports to ensure that an acceptable level of scoring accuracy was maintained. Interscorer reliability was tracked and monitored with multiple quality control reports that were reviewed by MI scoring staff. These reports were reviewed by the program manager, scoring project director, scoring directors, and team leaders. The following reports, available in daily, cumulative, and summary formats, were used during handscoring:

- Interscorer Reliability Reports displayed how often scorers were in exact agreement and supported maintaining an acceptable agreement rate. These reports provided exact, adjacent (raters match within one point), and nonadjacent (raters match within one point) interscorer agreement, as well as mismatches between scores and nonscorable codes and within nonscorable codes. They also indicated the number of responses read by each scorer.
- Score Point Distribution Reports displayed the percentage of responses that had been assigned each of the score points and nonscorable codes.
- Validity Reports tracked how the scorers performed by comparing predetermined scored responses to scores assigned by the selected scorer on the same set of responses. If the assigned score of the selected scorer fell outside of a determined percentage of agreement, remediation occurred and additional responses were reviewed by the team leader of the individual(s) who needed to be monitored more closely.
- Item Status Reports tracked each item and indicated the status (e.g., "first read complete," "tabled"). This report was used to monitor the overall status and progress of handscoring.


## Maintaining Consistency

MI utilized numerous processes to ensure scorer accuracy and detect drift. The objective of the scoring process is to make sure that scorers rate student responses in a manner consistent with ELPA21 standards, within a single administration of ELPA21, as well as across multiple administrations.

The validity selection process involved MI scoring staff selecting 30-75 responses per item from live responses from the current administration to serve as validity responses. Validity responses were selected to illustrate trends identified by leadership in live responses but not strongly reflected in the anchor sets, represent particular types of responses identified as challenging to score during training, and assess transfer of scorers' knowledge of the anchor responses. Vetting of new validity responses involved identification and recommendation by team leaders while conducting read-behinds/listen-behinds, review and approval by scoring directors, and review and approval by the scoring project director.

The validity responses were used during handscoring to verify scorer accuracy. Validity responses were dispersed intermittently to the scorers throughout scoring at a rate of at least $10 \%$ of the total responses. These validity responses were blind reads, meaning that scorers saw these responses
the same as they saw the actual live student responses; there was no distinguishable difference. This helped ensure the internal validity of the process. All scorers who received validity responses had already successfully completed the training and qualifying process.

Next, the scores that the scorers assigned to the validity responses were compared to the predetermined scores in order to determine the validity of the scorers' scores. For each item, the percentage of exact agreement and the percentage of high and low scores were computed. The same data were also computed for each specific scorer. Using these pieces of data, various validity reports could be produced in real time and used to monitor for potential drift.

If results indicated that there was drift, or shifts in scoring over time, for a particular response, item, or scorer, action was taken to correct it. This action could include individual scorer retraining, room-wide retraining/recalibration, and/or rescoring responses where it was determined a scorer had been errantly assigning scores. Sometimes, when a particular validity response generated low agreement, an example of a similar response could be found in the existing training materials. If this was the case, a review of that particular training response was pursued in order to realign the scorer.

In most cases, including the 2019-2020 administration, there was not a room drift. Through the questions provided by notes, the use of reader reliability reports, and through read-behinds, the leadership can review particular types of responses and determine if there is a possible or potential shift in the scoring of those responses. The scoring directors create recalibration sets that consist of commonly seen type of responses. These recalibration sets are given to the teams at the beginning of every week to help deter any negative trends or drifts. Additional recalibration sets are created if the scoring director starts to see a trend of a drift and can be given at any time it is determined warranted. All recalibration sets are approved by the scoring management before given to the scoring teams.

Recalibration sets consisting of a validation set representing a variety of score points in random score point order were also used to maintain consistency. Sets varied in size from three to five responses based on particular issues observed during scoring. The recalibration sets were distributed at the beginning of the morning on a weekly basis. MI also recalibrated approximately once a week with scorers who had missed a required day's scoring session and were required to recalibrate. Scorers achieving less than an acceptable percentage of correct scores on these responses were monitored closely throughout that day. Scorers who did not demonstrate improvement received personal and extensive retraining. These scorers continued to be monitored on an individual basis until the next recalibration round took place.

By implementing these scoring procedures-using the same training materials whenever possible, utilizing a suite of real-time reports, and making training decisions based on report data-MI maximized scoring reliability and validity.

### 9.2.4 Quality Control on Final Scores

CAI's scoring engine is used to produce final scores upon receiving handscores. Before operational scoring, CAI created mock-ups of student records to verify the accuracy of the scoring engine. Both CAI's analysis team (responsible for the scoring engine) and psychometricians independently computed scores on the mock-ups of student records. The psychometric team performed score
verification using a different software and compared the scoring results with those from CAI's scoring engine. Both teams compared their results iteratively until a $100 \%$ match was reached.

During operational scoring, CAI's psychometricians independently scored students and compared the scores with the results from the scoring engine. Discrepancies were iteratively resolved until a $100 \%$ match was reached.

Before final scores were delivered to the State, they were also compared with the unofficial scores from CRESST, if needed. Discrepancies were again investigated and resolved until a $100 \%$ match was reached.

### 9.3 Quality Assurance in Reporting

In 2019-2020, two types of score reports were produced for both summative and screener tests: online reports and printed reports (family reports only).

### 9.3.1 Online Report Quality Assurance

Every test undergoes a series of validation checks. Once the Quality Monitoring System (QMS) signs off, data are passed to the Database of Record (DoR), which serves as the centralized location for all student scores and responses, ensuring that there is only one place where the official record is stored. Only after scores have passed the QA checks and are uploaded to the DoR are they passed to the ORS, which is responsible for presenting individual-level results and calculating and presenting aggregate results. Absolutely no score is reported in the Online Reporting System (ORS) until it passes all of the QA system's validation checks.

### 9.3.2 Paper Report Quality Assurance

## Statistical Programming

The family reports contain custom programming and require rigorous quality assurance processes to ensure their accuracy. All custom programming is guided by detailed and precise specifications in our reporting specifications document. Upon approval of the specifications, analytic rules are programmed and each program is extensively tested on test decks and real data from other programs. The final programs are reviewed by two senior statisticians and one senior programmer to ensure that they implement agreed-upon procedures. Custom programming is implemented independently by two statistical programming teams working from the specifications. Only when the output from both teams matches exactly are the scripts released for production. Quality control, however, does not stop there.

Much of the statistical processing is repeated, and CAI has implemented a structured software development process to ensure that the repeated tasks are implemented correctly and identically each time. CAI's software developers write small programs called macros that take specified data as input and produce data sets containing derived variables as output. Approximately 30 such macros reside in CAI's library. Each macro is extensively tested and stored in a central development server. Once a macro is tested and stored, changes to the macro must be approved by the director of score reporting and the director of psychometrics, as well as by the project directors for affected projects.

Each change is followed by a complete retesting with the entire collection of scenarios on which the macro was originally tested. The main statistical program is made up mostly of calls to various macros, including macros that read in and verify the data and conversion tables and macros that do the many complex calculations. This program is developed and tested using artificial data generated to test both typical and extreme cases. In addition, the program goes through a rigorous code review by a senior statistician.

## Display Programming

The paper report development process uses graphical programming, which takes place in a Xeroxdeveloped programming language called Variable Data Intelligent PostScript Printware (VIPP) and allows virtually infinite control of the visual appearance of the reports. After designers at CAI create backgrounds, our VIPP programmers write code that indicates where to place all variable information (data, graphics, and text) on the reports. The VIPP code is tested using both artificial and real data. CAI's data generation utilities can read the output layout specifications and generate artificial data for direct input into the VIPP programs. This allows the testing of these programs to begin before the statistical programming is complete. In later stages, artificial data are generated according to the input layout and run through the score reporting statistical programs, and the output is formatted as VIPP input. This enables us to test the entire system. Programmed output goes through multiple stages of review and revision by graphics editors and the score reporting team to ensure that design elements are accurately reproduced and data are correctly displayed.

Once we receive final data and VIPP programs, the CAI score reporting team reviews proofs that contain actual data based on our standard quality assurance documentation. In addition, we compare data independently calculated by CAI psychometricians with data on the reports. A large sample of reports is reviewed by several CAI staff members to make sure that all data are correctly placed on reports. This rigorous review is typically conducted over several days and takes place in a secure location at CAI. All reports containing actual data are stored in a locked storage area. Prior to printing the reports, CAI provides a live data file and individual student reports with sample districts for the state staff review. CAI works closely with each state to resolve questions and correct any problems. The reports are not delivered until the state approves the sample reports and data file.

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# Section 1: Summative Assessment - Scale Score Summary 

* Domains with Exemption or Not Attempted are excluded.
* The statistics are suppressed when the N count is fewer than 10 .

Table S1.1: Summative Scale Score Summary by Subgroup - Kindergarten

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 10,052 | 237 | 561.6 | 775 | 78.3 | 9,925 | 247 | 561.6 | 770 | 77.4 |
| Gender | Female | 4,792 | 269 | 570.0 | 775 | 77.9 | 4,749 | 295 | 569.5 | 770 | 77.4 |
|  | Male | 5,070 | 237 | 553.5 | 775 | 77.7 | 4,991 | 247 | 553.8 | 770 | 76.5 |
|  | Missing | 190 | 370 | 567.0 | 775 | 80.6 | 185 | 383 | 568.9 | 770 | 79.1 |
| Ethnicity | American Indian or Alaskan Native | 18 | 428 | 564.3 | 663 | 67.4 | 18 | 447 | 563.2 | 651 | 61.1 |
|  | Asian | 2,510 | 237 | 579.2 | 775 | 77.5 | 2,498 | 247 | 579.4 | 770 | 76.9 |
|  | Black or African American | 1,887 | 237 | 558.3 | 775 | 76.0 | 1,868 | 247 | 556.4 | 770 | 75.9 |
|  | Hispanic or Latino | 2,686 | 269 | 546.5 | 768 | 74.1 | 2,642 | 295 | 546.9 | 760 | 72.4 |
|  | Native Hawaiian or Other Pacific Islander | 48 | 392 | 560.3 | 747 | 78.7 | 48 | 406 | 566.6 | 743 | 78.9 |
|  | Two or More Races | 1,261 | 237 | 542.0 | 760 | 82.0 | 1,233 | 247 | 543.3 | 756 | 80.2 |
|  | White | 1,612 | 309 | 578.4 | 775 | 76.7 | 1,588 | 301 | 577.7 | 770 | 76.4 |
|  | Other/Unknown | 30 | 417 | 583.2 | 707 | 84.5 | 30 | 420 | 585.3 | 704 | 85.8 |
| Other | Gifted | 2 |  |  |  |  | 2 |  |  |  |  |
|  | IEP | 508 | 237 | 513.9 | 742 | 79.8 | 462 | 247 | 527.6 | 743 | 75.0 |
|  | Migrant | 16 | 460 | 554.0 | 670 | 72.7 | 18 | 454 | 549.6 | 663 | 65.5 |
| Primary Disability | Autism | 123 | 237 | 479.5 | 643 | 76.9 | 93 | 247 | 509.7 | 652 | 72.8 |
|  | Developmental delay | 9 |  |  |  |  | 7 |  |  |  |  |
|  | Emotional disturbance | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Hearing Impaired | 3 |  |  |  |  | 4 |  |  |  |  |
|  | Intellectual Disability | 25 | 335 | 453.0 | 530 | 46.6 | 20 | 356 | 460.2 | 537 | 51.3 |
|  | Multiple disabilities | 20 | 237 | 410.5 | 509 | 71.7 | 10 | 247 | 422.6 | 521 | 80.5 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 10 | 237 | 513.6 | 694 | 116.5 | 10 | 247 | 517.6 | 688 | 115.4 |
|  | Other health impairment | 41 | 342 | 528.5 | 707 | 82.3 | 40 | 307 | 535.3 | 705 | 81.5 |
|  | Specific learning disability | 35 | 432 | 524.9 | 628 | 51.6 | 34 | 409 | 525.8 | 634 | 55.3 |
|  | Speech or language impairment | 223 | 361 | 546.1 | 742 | 67.1 | 225 | 340 | 546.7 | 743 | 68.1 |
|  | Traumatic brain injury | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Visual impairment | 5 |  |  |  |  | 4 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.1: Summative Scale Score Summary by Subgroup - Kindergarten (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 9,758 | 291 | 587.2 | 756 | 82.6 | 9,899 | 309 | 543.7 | 723 | 78.7 |
| Gender | Female | 4,678 | 304 | 595.1 | 756 | 80.6 | 4,739 | 323 | 546.6 | 723 | 78.0 |
|  | Male | 4,897 | 291 | 579.7 | 756 | 83.7 | 4,977 | 309 | 540.3 | 723 | 79.0 |
|  | Missing | 183 | 331 | 585.0 | 756 | 88.5 | 183 | 382 | 562.1 | 723 | 83.2 |
| Ethnicity | American Indian or Alaskan Native | 17 | 516 | 611.4 | 708 | 58.7 | 19 | 440 | 553.1 | 674 | 79.9 |
|  | Asian | 2,460 | 291 | 603.3 | 756 | 76.2 | 2,483 | 309 | 574.1 | 723 | 77.9 |
|  | Black or African American | 1,834 | 291 | 596.5 | 756 | 72.7 | 1,858 | 309 | 541.5 | 723 | 76.9 |
|  | Hispanic or Latino | 2,596 | 304 | 571.1 | 753 | 85.0 | 2,623 | 323 | 517.7 | 719 | 69.2 |
|  | Native Hawaiian or Other Pacific Islander | 47 | 388 | 585.8 | 744 | 71.6 | 48 | 400 | 550.3 | 709 | 82.7 |
|  | Two or More Races | 1,221 | 291 | 558.3 | 750 | 98.1 | 1,250 | 309 | 518.4 | 716 | 75.8 |
|  | White | 1,560 | 338 | 599.5 | 756 | 75.9 | 1,588 | 358 | 560.9 | 723 | 77.3 |
|  | Other/Unknown | 23 | 352 | 630.3 | 732 | 76.5 | 30 | 426 | 576.2 | 693 | 82.5 |
| Other | Gifted | 2 |  |  |  |  | 2 |  |  |  |  |
|  | IEP | 452 | 291 | 529.1 | 729 | 90.3 | 454 | 309 | 516.0 | 709 | 78.9 |
|  | Migrant | 17 | 355 | 547.7 | 693 | 99.9 | 17 | 417 | 530.0 | 679 | 80.6 |
| Primary Disability | Autism | 91 | 291 | 497.9 | 671 | 96.6 | 89 | 309 | 531.7 | 674 | 88.7 |
|  | Developmental delay | 7 |  |  |  |  | 8 |  |  |  |  |
|  | Emotional disturbance | 7 |  |  |  |  | 6 |  |  |  |  |
|  | Hearing Impaired | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Intellectual Disability | 20 | 322 | 449.2 | 577 | 73.6 | 20 | 344 | 458.7 | 642 | 72.1 |
|  | Multiple disabilities | 14 | 291 | 398.4 | 542 | 81.7 | 11 | 309 | 423.5 | 487 | 58.6 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 10 | 291 | 536.1 | 692 | 110.4 | 10 | 309 | 492.8 | 649 | 101.3 |
|  | Other health impairment | 35 | 319 | 548.5 | 727 | 95.2 | 39 | 340 | 509.3 | 695 | 84.5 |
|  | Specific learning disability | 33 | 414 | 543.5 | 634 | 62.6 | 34 | 428 | 505.7 | 661 | 54.5 |
|  | Speech or language impairment | 219 | 325 | 555.2 | 729 | 73.0 | 222 | 347 | 522.4 | 709 | 71.9 |
|  | Traumatic brain injury | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Visual impairment | 5 |  |  |  |  | 4 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.1: Summative Scale Score Summary by Subgroup - Kindergarten (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 10,090 | 3377 | 5560.2 | 6865 | 552.8 | 10,123 | 3185 | 5600.5 | 7178 | 581.1 |
| Gender | Female | 4,812 | 3616 | 5621.2 | 6865 | 552.6 | 4,821 | 3376 | 5656.1 | 7178 | 573.4 |
|  | Male | 5,088 | 3377 | 5501.3 | 6865 | 546.7 | 5,110 | 3185 | 5545.5 | 7178 | 581.7 |
|  | Missing | 190 | 4278 | 5594.1 | 6865 | 550.8 | 192 | 3943 | 5668.9 | 7178 | 616.9 |
| Ethnicity | American Indian or Alaskan Native | 18 | 4661 | 5550.3 | 6210 | 440.2 | 19 | 4796 | 5647.9 | 6365 | 505.4 |
|  | Asian | 2,519 | 3377 | 5667.8 | 6865 | 538.0 | 2,519 | 3185 | 5772.7 | 7178 | 562.7 |
|  | Black or African American | 1,896 | 3377 | 5521.7 | 6865 | 542.0 | 1,904 | 3185 | 5594.4 | 7178 | 552.5 |
|  | Hispanic or Latino | 2,703 | 3660 | 5472.5 | 6865 | 532.3 | 2,715 | 3376 | 5455.0 | 7130 | 546.3 |
|  | Native Hawaiian or Other Pacific Islander | 48 | 4395 | 5578.1 | 6865 | 561.0 | 48 | 4313 | 5628.9 | 6991 | 564.4 |
|  | Two or More Races | 1,263 | 3377 | 5439.1 | 6865 | 584.1 | 1,269 | 3185 | 5406.4 | 7085 | 625.3 |
|  | White | 1,613 | 3616 | 5676.3 | 6865 | 545.1 | 1,618 | 3955 | 5730.5 | 7178 | 552.1 |
|  | Other/Unknown | 30 | 4583 | 5695.1 | 6615 | 595.8 | 31 | 4553 | 5823.4 | 6806 | 635.1 |
| Other | Gifted | 2 |  |  |  |  | 2 |  |  |  |  |
|  | IEP | 513 | 3377 | 5260.0 | 6796 | 572.7 | 516 | 3185 | 5228.1 | 6928 | 588.1 |
|  | Migrant | 18 | 4853 | 5495.1 | 6349 | 472.8 | 18 | 4566 | 5440.5 | 6416 | 561.9 |
| Primary Disability | Autism | 124 | 3377 | 5021.2 | 6211 | 534.9 | 124 | 3185 | 5052.5 | 6365 | 573.3 |
|  | Developmental delay | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Emotional disturbance | 6 |  |  |  |  | 7 |  |  |  |  |
|  | Hearing Impaired | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Intellectual Disability | 25 | 4088 | 4819.8 | 5316 | 334.9 | 25 | 3686 | 4728.7 | 5446 | 408.2 |
|  | Multiple disabilities | 20 | 3377 | 4543.2 | 5196 | 488.9 | 21 | 3185 | 4462.8 | 5317 | 520.0 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 10 | 3377 | 5269.2 | 6605 | 818.9 | 10 | 3185 | 5205.0 | 6361 | 861.3 |
|  | Other health impairment | 41 | 3952 | 5361.2 | 6490 | 572.4 | 41 | 3556 | 5316.5 | 6699 | 649.8 |
|  | Specific learning disability | 35 | 4527 | 5328.8 | 6194 | 395.5 | 35 | 4664 | 5297.7 | 6026 | 383.6 |
|  | Speech or language impairment | 226 | 4118 | 5486.7 | 6796 | 506.2 | 226 | 3716 | 5436.2 | 6928 | 493.4 |
|  | Traumatic brain injury | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Visual impairment | 5 |  |  |  |  | 5 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.2: Summative Scale Score Summary by Subgroup - Grade 1

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 8,723 | 239 | 559.1 | 712 | 72.8 | 8,628 | 241 | 554.6 | 744 | 79.3 |
| Gender | Female | 4,128 | 295 | 564.6 | 712 | 71.8 | 4,104 | 302 | 560.2 | 744 | 80.2 |
|  | Male | 4,475 | 239 | 554.2 | 712 | 73.3 | 4,406 | 241 | 549.4 | 744 | 78.3 |
|  | Missing | 120 | 368 | 556.9 | 701 | 73.5 | 118 | 411 | 552.4 | 735 | 75.9 |
| Ethnicity | American Indian or Alaskan Native | 28 | 450 | 557.1 | 701 | 67.8 | 28 | 423 | 553.9 | 720 | 85.7 |
|  | Asian | 2,019 | 275 | 575.4 | 712 | 72.2 | 2,001 | 365 | 584.4 | 744 | 78.7 |
|  | Black or African American | 1,597 | 275 | 554.3 | 712 | 71.4 | 1,572 | 302 | 555.2 | 744 | 75.6 |
|  | Hispanic or Latino | 2,520 | 239 | 547.9 | 712 | 68.7 | 2,493 | 241 | 530.6 | 744 | 72.0 |
|  | Native Hawaiian or Other Pacific Islander | 55 | 402 | 569.7 | 691 | 79.3 | 55 | 373 | 571.8 | 717 | 82.4 |
|  | Two or More Races | 1,078 | 295 | 542.0 | 712 | 76.7 | 1,074 | 266 | 530.2 | 744 | 77.8 |
|  | White | 1,397 | 275 | 574.1 | 712 | 71.8 | 1,378 | 351 | 572.2 | 744 | 78.5 |
|  | Other/Unknown | 29 | 416 | 564.7 | 684 | 70.9 | 27 | 415 | 569.3 | 711 | 82.9 |
| Other | Gifted | 23 | 478 | 607.4 | 684 | 49.8 | 23 | 409 | 615.6 | 695 | 73.6 |
|  | IEP | 600 | 275 | 506.1 | 701 | 76.4 | 530 | 306 | 511.6 | 728 | 70.2 |
|  | Migrant | 22 | 400 | 544.7 | 692 | 84.3 | 22 | 428 | 529.3 | 710 | 78.3 |
| Primary Disability | Autism | 116 | 275 | 462.6 | 670 | 81.9 | 84 | 306 | 512.7 | 700 | 83.4 |
|  | Developmental delay | 2 |  |  |  |  | 1 |  |  |  |  |
|  | Emotional disturbance | 14 | 378 | 503.6 | 637 | 78.6 | 13 | 413 | 506.7 | 614 | 56.8 |
|  | Hearing Impaired | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 33 | 372 | 468.9 | 613 | 59.3 | 26 | 401 | 455.3 | 580 | 50.6 |
|  | Multiple disabilities | 26 | 275 | 407.6 | 586 | 73.5 | 10 | 395 | 484.8 | 630 | 78.6 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 13 | 424 | 533.2 | 683 | 74.0 | 11 | 412 | 520.9 | 721 | 93.9 |
|  | Other health impairment | 68 | 359 | 515.2 | 653 | 71.7 | 60 | 377 | 507.9 | 655 | 62.1 |
|  | Specific learning disability | 85 | 376 | 514.5 | 637 | 54.6 | 84 | 395 | 486.1 | 667 | 57.6 |
|  | Speech or language impairment | 227 | 389 | 540.0 | 701 | 60.3 | 227 | 405 | 528.3 | 728 | 66.9 |
|  | Traumatic brain injury | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.2: Summative Scale Score Summary by Subgroup - Grade 1 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 8,534 | 265 | 584.7 | 736 | 71.4 | 8,584 | 245 | 552.7 | 733 | 82.3 |
| Gender | Female | 4,070 | 304 | 590.1 | 736 | 71.1 | 4,085 | 290 | 559.1 | 733 | 81.9 |
|  | Male | 4,348 | 265 | 579.9 | 736 | 71.2 | 4,383 | 245 | 546.6 | 733 | 82.5 |
|  | Missing | 116 | 311 | 573.2 | 731 | 74.0 | 116 | 374 | 556.1 | 723 | 75.6 |
| Ethnicity | American Indian or Alaskan Native | 27 | 492 | 607.8 | 727 | 55.2 | 28 | 411 | 555.8 | 715 | 86.7 |
|  | Asian | 1,977 | 300 | 601.3 | 736 | 67.0 | 1,987 | 353 | 582.3 | 733 | 75.9 |
|  | Black or African American | 1,565 | 306 | 586.1 | 736 | 63.2 | 1,575 | 290 | 553.8 | 733 | 77.7 |
|  | Hispanic or Latino | 2,448 | 265 | 572.1 | 736 | 71.3 | 2,469 | 245 | 528.6 | 733 | 79.3 |
|  | Native Hawaiian or Other Pacific Islander | 55 | 328 | 586.4 | 701 | 65.1 | 55 | 341 | 565.8 | 702 | 84.0 |
|  | Two or More Races | 1,067 | 276 | 563.4 | 736 | 84.6 | 1,070 | 272 | 525.8 | 733 | 86.8 |
|  | White | 1,370 | 306 | 597.2 | 736 | 67.6 | 1,372 | 340 | 571.9 | 733 | 78.3 |
|  | Other/Unknown | 25 | 469 | 599.3 | 693 | 60.8 | 28 | 385 | 567.9 | 694 | 86.0 |
| Other | Gifted | 23 | 533 | 630.4 | 693 | 43.3 | 22 | 385 | 613.1 | 688 | 72.0 |
|  | IEP | 530 | 300 | 539.1 | 727 | 75.3 | 529 | 313 | 502.0 | 714 | 84.0 |
|  | Migrant | 22 | 353 | 571.0 | 681 | 77.4 | 22 | 392 | 536.9 | 701 | 77.6 |
| Primary Disability | Autism | 83 | 300 | 487.3 | 665 | 97.7 | 82 | 313 | 504.9 | 681 | 92.4 |
|  | Developmental delay | 2 |  |  |  |  | 1 |  |  |  |  |
|  | Emotional disturbance | 14 | 328 | 511.9 | 657 | 92.2 | 13 | 358 | 486.1 | 636 | 88.7 |
|  | Hearing Impaired | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 27 | 332 | 487.6 | 601 | 74.4 | 27 | 349 | 424.5 | 633 | 81.0 |
|  | Multiple disabilities | 9 |  |  |  |  | 9 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 11 | 394 | 571.3 | 726 | 92.4 | 11 | 370 | 513.8 | 712 | 112.0 |
|  | Other health impairment | 62 | 352 | 549.9 | 656 | 63.1 | 61 | 359 | 496.8 | 653 | 81.2 |
|  | Specific learning disability | 83 | 386 | 540.2 | 661 | 63.6 | 84 | 340 | 470.0 | 655 | 76.1 |
|  | Speech or language impairment | 224 | 371 | 564.2 | 727 | 56.0 | 227 | 366 | 526.5 | 714 | 73.3 |
|  | Traumatic brain injury | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.2: Summative Scale Score Summary by Subgroup - Grade 1 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 8,758 | 3428 | 5538.4 | 6640 | 512.9 | 8,802 | 3021 | 5604.5 | 6998 | 582.9 |
| Gender | Female | 4,147 | 3814 | 5576.7 | 6640 | 511.7 | 4,170 | 3444 | 5655.2 | 6998 | 578.3 |
|  | Male | 4,491 | 3428 | 5503.5 | 6633 | 511.6 | 4,512 | 3021 | 5558.4 | 6998 | 583.6 |
|  | Missing | 120 | 4534 | 5521.8 | 6633 | 511.3 | 120 | 4072 | 5580.6 | 6891 | 569.4 |
| Ethnicity | American Indian or Alaskan Native | 29 | 4797 | 5494.9 | 6503 | 501.3 | 29 | 4784 | 5629.2 | 6884 | 582.9 |
|  | Asian | 2,024 | 3836 | 5698.9 | 6633 | 516.5 | 2,028 | 3789 | 5793.5 | 6998 | 558.0 |
|  | Black or African American | 1,603 | 3814 | 5521.6 | 6633 | 501.2 | 1,610 | 3444 | 5598.0 | 6998 | 550.0 |
|  | Hispanic or Latino | 2,532 | 3428 | 5418.3 | 6633 | 467.3 | 2,550 | 3021 | 5460.3 | 6998 | 549.5 |
|  | Native Hawaiian or Other Pacific Islander | 55 | 4363 | 5655.4 | 6633 | 562.9 | 55 | 4232 | 5696.0 | 6713 | 577.8 |
|  | Two or More Races | 1,082 | 3759 | 5396.1 | 6633 | 513.8 | 1,090 | 3307 | 5423.2 | 6998 | 625.1 |
|  | White | 1,404 | 3836 | 5647.8 | 6640 | 508.7 | 1,410 | 3811 | 5735.2 | 6998 | 567.6 |
|  | Other/Unknown | 29 | 4532 | 5598.6 | 6445 | 516.5 | 30 | 4403 | 5687.4 | 6587 | 560.0 |
| Other | Gifted | 23 | 4762 | 5908.0 | 6373 | 409.8 | 23 | 4681 | 6060.3 | 6651 | 435.0 |
|  | IEP | 605 | 3836 | 5184.1 | 6633 | 487.0 | 612 | 3789 | 5160.3 | 6873 | 573.1 |
|  | Migrant | 22 | 4599 | 5394.0 | 6525 | 555.5 | 22 | 4225 | 5469.6 | 6686 | 605.1 |
| Primary Disability | Autism | 118 | 3836 | 4992.6 | 6633 | 560.7 | 122 | 3789 | 4925.0 | 6437 | 628.9 |
|  | Developmental delay | 2 |  |  |  |  | 3 |  |  |  |  |
|  | Emotional disturbance | 14 | 4454 | 5171.1 | 5945 | 414.5 | 14 | 3993 | 5081.1 | 6250 | 604.8 |
|  | Hearing Impaired | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Intellectual Disability | 33 | 4402 | 4909.5 | 5779 | 347.8 | 33 | 4036 | 4771.2 | 6048 | 498.7 |
|  | Multiple disabilities | 27 | 3836 | 4646.4 | 6029 | 495.0 | 27 | 3811 | 4558.6 | 5892 | 469.4 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 13 | 4589 | 5316.6 | 6431 | 515.5 | 13 | 4364 | 5371.0 | 6819 | 699.8 |
|  | Other health impairment | 68 | 4195 | 5221.1 | 6161 | 439.4 | 68 | 4072 | 5208.1 | 6253 | 522.9 |
|  | Specific learning disability | 86 | 4370 | 5160.4 | 6467 | 357.4 | 86 | 4026 | 5108.2 | 6272 | 455.1 |
|  | Speech or language impairment | 227 | 4526 | 5382.7 | 6633 | 412.5 | 229 | 4343 | 5419.3 | 6873 | 468.0 |
|  | Traumatic brain injury | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.3: Summative Scale Score Summary by Subgroup - Grade 2

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 7,247 | 272 | 525.2 | 726 | 65.8 | 7,128 | 260 | 525.0 | 744 | 66.9 |
| Gender | Female | 3,307 | 272 | 529.8 | 709 | 64.2 | 3,266 | 343 | 531.9 | 722 | 66.7 |
|  | Male | 3,845 | 279 | 521.3 | 726 | 66.9 | 3,770 | 260 | 519.0 | 744 | 66.5 |
|  | Missing | 95 | 276 | 524.6 | 647 | 66.3 | 92 | 326 | 528.5 | 666 | 69.7 |
| Ethnicity | American Indian or Alaskan Native | 17 | 361 | 515.0 | 616 | 70.8 | 17 | 409 | 520.0 | 626 | 64.9 |
|  | Asian | 1,467 | 272 | 534.8 | 699 | 62.0 | 1,451 | 375 | 542.8 | 723 | 63.4 |
|  | Black or African American | 1,406 | 272 | 527.8 | 686 | 62.2 | 1,385 | 319 | 527.5 | 722 | 63.1 |
|  | Hispanic or Latino | 2,241 | 272 | 517.9 | 726 | 65.8 | 2,209 | 260 | 512.8 | 744 | 65.3 |
|  | Native Hawaiian or Other Pacific Islander | 45 | 345 | 525.2 | 626 | 57.5 | 45 | 406 | 529.5 | 647 | 63.5 |
|  | Two or More Races | 950 | 296 | 509.3 | 682 | 72.8 | 921 | 350 | 506.3 | 704 | 71.6 |
|  | White | 1,099 | 312 | 538.3 | 709 | 64.2 | 1,078 | 378 | 538.9 | 720 | 66.6 |
|  | Other/Unknown | 22 | 345 | 514.0 | 637 | 78.3 | 22 | 397 | 517.4 | 623 | 73.2 |
| Other | Gifted | 36 | 440 | 573.2 | 659 | 50.3 | 36 | 467 | 583.2 | 686 | 63.3 |
|  | Home Schooled | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 601 | 272 | 479.9 | 679 | 67.7 | 524 | 260 | 479.5 | 670 | 56.9 |
|  | Migrant | 20 | 368 | 520.9 | 644 | 79.4 | 20 | 378 | 516.1 | 670 | 82.1 |
| Primary Disability | Autism | 95 | 272 | 448.0 | 679 | 73.7 | 71 | 388 | 484.6 | 670 | 61.7 |
|  | Developmental delay | 4 |  |  |  |  | 2 |  |  |  |  |
|  | Emotional disturbance | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Hearing Impaired | 6 |  |  |  |  | 9 |  |  |  |  |
|  | Intellectual Disability | 38 | 340 | 437.0 | 539 | 50.7 | 30 | 319 | 439.5 | 511 | 43.2 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 35 | 272 | 385.2 | 571 | 60.3 | 9 |  |  |  |  |
|  | Orthopedic impairment | 5 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 77 | 312 | 494.2 | 620 | 59.1 | 71 | 383 | 478.0 | 628 | 50.5 |
|  | Specific learning disability | 186 | 375 | 493.3 | 634 | 52.5 | 177 | 386 | 468.6 | 642 | 46.0 |
|  | Speech or language impairment | 142 | 319 | 511.5 | 646 | 57.9 | 141 | 375 | 509.1 | 654 | 58.3 |
|  | Traumatic brain injury | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.3: Summative Scale Score Summary by Subgroup - Grade 2 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 7,001 | 267 | 550.4 | 735 | 70.8 | 7,081 | 267 | 523.4 | 723 | 69.5 |
| Gender | Female | 3,220 | 267 | 556.4 | 723 | 69.5 | 3,248 | 290 | 531.0 | 723 | 68.2 |
|  | Male | 3,692 | 268 | 545.1 | 735 | 71.3 | 3,740 | 267 | 516.7 | 710 | 69.8 |
|  | Missing | 89 | 301 | 551.7 | 656 | 74.6 | 93 | 328 | 527.3 | 657 | 71.8 |
| Ethnicity | American Indian or Alaskan Native | 17 | 386 | 544.7 | 636 | 67.2 | 17 | 375 | 504.9 | 617 | 73.0 |
|  | Asian | 1,427 | 303 | 559.5 | 724 | 67.3 | 1,443 | 324 | 540.5 | 710 | 64.0 |
|  | Black or African American | 1,355 | 297 | 556.6 | 723 | 60.5 | 1,378 | 332 | 526.2 | 709 | 66.0 |
|  | Hispanic or Latino | 2,173 | 267 | 539.8 | 735 | 73.8 | 2,185 | 267 | 511.7 | 684 | 68.1 |
|  | Native Hawaiian or Other Pacific Islander | 40 | 329 | 545.5 | 672 | 76.4 | 45 | 380 | 533.8 | 639 | 64.8 |
|  | Two or More Races | 913 | 292 | 531.8 | 699 | 82.8 | 922 | 321 | 503.2 | 700 | 76.5 |
|  | White | 1,057 | 287 | 568.1 | 714 | 62.5 | 1,069 | 299 | 538.0 | 723 | 68.4 |
|  | Other/Unknown | 19 | 366 | 549.8 | 622 | 58.4 | 22 | 393 | 519.3 | 637 | 72.1 |
| Other | Gifted | 37 | 424 | 595.3 | 701 | 57.8 | 36 | 494 | 585.6 | 680 | 54.6 |
|  | Home Schooled | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 524 | 267 | 511.3 | 684 | 68.3 | 524 | 267 | 471.4 | 658 | 65.4 |
|  | Migrant | 20 | 345 | 546.8 | 668 | 73.0 | 20 | 387 | 515.9 | 663 | 78.9 |
| Primary Disability | Autism | 67 | 287 | 486.6 | 660 | 75.8 | 71 | 310 | 468.3 | 658 | 70.6 |
|  | Developmental delay | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Emotional disturbance | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Hearing Impaired | 5 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 30 | 328 | 456.0 | 588 | 65.6 | 30 | 346 | 426.0 | 532 | 52.3 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 12 | 267 | 390.8 | 519 | 85.4 | 11 | 267 | 373.7 | 461 | 63.4 |
|  | Orthopedic impairment | 2 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 75 | 306 | 519.2 | 611 | 60.3 | 72 | 299 | 472.5 | 627 | 63.1 |
|  | Specific learning disability | 178 | 377 | 517.9 | 659 | 53.1 | 177 | 369 | 465.5 | 600 | 55.6 |
|  | Speech or language impairment | 141 | 300 | 535.0 | 684 | 63.1 | 139 | 347 | 501.6 | 651 | 63.4 |
|  | Traumatic brain injury | 1 |  |  |  |  | 2 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.3: Summative Scale Score Summary by Subgroup - Grade 2 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 7,282 | 3659 | 5306.3 | 6729 | 475.6 | 7,322 | 3294 | 5337.0 | 6977 | 526.7 |
| Gender | Female | 3,318 | 3659 | 5346.3 | 6729 | 467.8 | 3,346 | 3510 | 5392.1 | 6802 | 514.4 |
|  | Male | 3,869 | 3701 | 5271.7 | 6729 | 479.5 | 3,881 | 3294 | 5289.0 | 6977 | 532.1 |
|  | Missing | 95 | 3911 | 5316.7 | 6391 | 484.3 | 95 | 3562 | 5352.1 | 6341 | 544.7 |
| Ethnicity | American Indian or Alaskan Native | 17 | 4315 | 5284.0 | 6071 | 505.3 | 17 | 4111 | 5263.5 | 6031 | 555.0 |
|  | Asian | 1,474 | 3659 | 5407.8 | 6729 | 454.8 | 1,477 | 3648 | 5448.2 | 6828 | 492.6 |
|  | Black or African American | 1,411 | 3659 | 5322.0 | 6619 | 452.5 | 1,415 | 3641 | 5362.4 | 6802 | 488.3 |
|  | Hispanic or Latino | 2,256 | 3659 | 5236.5 | 6729 | 465.7 | 2,269 | 3294 | 5254.7 | 6977 | 526.5 |
|  | Native Hawaiian or Other Pacific Islander | 45 | 4253 | 5311.3 | 6183 | 425.4 | 45 | 4106 | 5362.6 | 6129 | 487.9 |
|  | Two or More Races | 952 | 3951 | 5182.9 | 6619 | 508.5 | 957 | 3649 | 5186.4 | 6520 | 587.8 |
|  | White | 1,105 | 3989 | 5401.0 | 6729 | 475.2 | 1,120 | 3638 | 5454.9 | 6758 | 502.2 |
|  | Other/Unknown | 22 | 4172 | 5241.0 | 6077 | 559.6 | 22 | 4050 | 5266.2 | 6031 | 573.4 |
| Other | Gifted | 36 | 4863 | 5683.5 | 6295 | 405.2 | 37 | 4811 | 5787.5 | 6428 | 412.1 |
|  | Home Schooled | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 611 | 3659 | 4964.8 | 6463 | 437.4 | 614 | 3294 | 4931.2 | 6445 | 494.4 |
|  | Migrant | 20 | 4183 | 5263.7 | 6200 | 596.4 | 20 | 4016 | 5292.0 | 6331 | 613.9 |
| Primary Disability | Autism | 98 | 3659 | 4828.3 | 6463 | 500.3 | 99 | 3648 | 4763.2 | 6445 | 540.8 |
|  | Developmental delay | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Emotional disturbance | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Hearing Impaired | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Intellectual Disability | 39 | 4003 | 4700.4 | 5415 | 311.6 | 40 | 3813 | 4609.0 | 5421 | 369.3 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 35 | 3659 | 4392.5 | 5183 | 354.1 | 35 | 3294 | 4296.0 | 5035 | 417.1 |
|  | Orthopedic impairment | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Other health impairment | 77 | 4054 | 5026.0 | 6026 | 372.9 | 77 | 3638 | 5014.7 | 6067 | 430.3 |
|  | Specific learning disability | 187 | 4270 | 4992.8 | 6427 | 336.3 | 187 | 4079 | 4978.3 | 6132 | 375.8 |
|  | Speech or language impairment | 144 | 4007 | 5217.5 | 6295 | 403.8 | 145 | 3873 | 5210.0 | 6152 | 457.5 |
|  | Traumatic brain injury | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.4: Summative Scale Score Summary by Subgroup - Grade 3

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 5,814 | 229 | 547.2 | 742 | 71.9 | 5,726 | 228 | 554.7 | 766 | 72.1 |
| Gender | Female | 2,590 | 229 | 549.9 | 742 | 72.0 | 2,554 | 228 | 561.8 | 766 | 70.9 |
|  | Male | 3,198 | 229 | 545.3 | 708 | 71.6 | 3,146 | 228 | 549.1 | 733 | 72.5 |
|  | Missing | 26 | 350 | 522.0 | 642 | 81.5 | 26 | 398 | 538.4 | 644 | 72.9 |
| Ethnicity | American Indian or Alaskan Native | 11 | 229 | 497.5 | 633 | 115.7 | 11 | 228 | 517.0 | 657 | 125.2 |
|  | Asian | 991 | 272 | 558.7 | 719 | 68.0 | 977 | 345 | 573.6 | 733 | 67.9 |
|  | Black or African American | 1,202 | 272 | 546.9 | 698 | 68.5 | 1,185 | 265 | 552.7 | 722 | 68.9 |
|  | Hispanic or Latino | 1,879 | 229 | 541.7 | 708 | 73.7 | 1,850 | 228 | 546.2 | 725 | 73.5 |
|  | Native Hawaiian or Other Pacific Islander | 50 | 421 | 559.2 | 689 | 54.4 | 50 | 435 | 571.9 | 688 | 58.2 |
|  | Two or More Races | 882 | 272 | 538.2 | 697 | 78.1 | 865 | 336 | 540.9 | 702 | 74.3 |
|  | White | 791 | 272 | 556.4 | 742 | 67.4 | 780 | 373 | 569.2 | 766 | 68.4 |
|  | Other/Unknown | 8 |  |  |  |  | 8 |  |  |  |  |
| Other | Gifted | 30 | 489 | 593.0 | 674 | 47.5 | 29 | 467 | 604.1 | 697 | 52.8 |
|  | IEP | 791 | 229 | 511.6 | 695 | 73.4 | 706 | 228 | 507.5 | 708 | 68.9 |
|  | Migrant | 28 | 353 | 546.9 | 697 | 96.9 | 29 | 395 | 541.7 | 702 | 91.1 |
| Primary Disability | Autism | 88 | 229 | 455.8 | 619 | 96.9 | 63 | 228 | 491.0 | 658 | 93.8 |
|  | Developmental delay | 6 |  |  |  |  | 3 |  |  |  |  |
|  | Emotional disturbance | 17 | 383 | 526.8 | 652 | 61.6 | 16 | 402 | 512.1 | 622 | 70.1 |
|  | Hearing Impaired | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 41 | 356 | 470.3 | 584 | 57.7 | 33 | 345 | 467.1 | 588 | 55.4 |
|  | Multiple disabilities | 32 | 229 | 380.5 | 524 | 61.0 | 12 | 228 | 403.5 | 468 | 63.2 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 5 |  |  |  |  | 6 |  |  |  |  |
|  | Other health impairment | 111 | 357 | 523.3 | 695 | 62.5 | 101 | 369 | 503.6 | 684 | 64.7 |
|  | Specific learning disability | 395 | 321 | 521.2 | 691 | 56.3 | 375 | 378 | 503.2 | 708 | 58.0 |
|  | Speech or language impairment | 94 | 400 | 564.9 | 658 | 47.0 | 94 | 384 | 564.0 | 661 | 56.2 |
|  | Traumatic brain injury | 2 |  |  |  |  | 0 |  |  |  |  |
|  | Visual impairment | 1 |  |  |  |  | 0 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.4: Summative Scale Score Summary by Subgroup - Grade 3 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 5,643 | 252 | 573.7 | 747 | 75.3 | 5,701 | 235 | 554.1 | 765 | 72.6 |
| Gender | Female | 2,519 | 252 | 578.8 | 747 | 75.2 | 2,547 | 235 | 560.9 | 765 | 70.8 |
|  | Male | 3,098 | 252 | 569.8 | 729 | 74.8 | 3,128 | 235 | 548.7 | 734 | 73.5 |
|  | Missing | 26 | 310 | 537.6 | 657 | 94.2 | 26 | 351 | 537.9 | 643 | 80.3 |
| Ethnicity | American Indian or Alaskan Native | 10 | 252 | 533.9 | 668 | 122.7 | 11 | 235 | 520.9 | 639 | 121.3 |
|  | Asian | 965 | 298 | 587.1 | 730 | 69.7 | 971 | 343 | 570.8 | 734 | 65.9 |
|  | Black or African American | 1,177 | 288 | 574.6 | 723 | 67.3 | 1,176 | 272 | 553.6 | 721 | 69.3 |
|  | Hispanic or Latino | 1,840 | 252 | 565.9 | 725 | 79.7 | 1,848 | 235 | 545.0 | 727 | 75.1 |
|  | Native Hawaiian or Other Pacific Islander | 50 | 362 | 584.7 | 677 | 55.3 | 50 | 434 | 575.9 | 673 | 53.3 |
|  | Two or More Races | 845 | 299 | 560.0 | 715 | 83.7 | 861 | 328 | 540.6 | 693 | 76.6 |
|  | White | 749 | 301 | 589.1 | 747 | 67.8 | 777 | 347 | 569.5 | 765 | 68.1 |
|  | Other/Unknown | 7 |  |  |  |  | 7 |  |  |  |  |
| Other | Gifted | 30 | 523 | 622.2 | 712 | 47.9 | 29 | 459 | 601.3 | 683 | 50.1 |
|  | IEP | 709 | 252 | 542.5 | 696 | 68.9 | 703 | 235 | 506.3 | 720 | 70.0 |
|  | Migrant | 29 | 377 | 562.4 | 715 | 96.1 | 28 | 386 | 539.9 | 683 | 84.5 |
| Primary Disability | Autism | 58 | 252 | 496.2 | 651 | 98.9 | 58 | 235 | 499.9 | 629 | 95.9 |
|  | Developmental delay | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Emotional disturbance | 18 | 307 | 537.6 | 629 | 76.2 | 16 | 374 | 508.9 | 652 | 74.9 |
|  | Hearing Impaired | 7 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 33 | 298 | 507.8 | 606 | 57.5 | 30 | 363 | 458.4 | 565 | 55.9 |
|  | Multiple disabilities | 13 | 252 | 418.1 | 538 | 93.5 | 13 | 235 | 380.4 | 485 | 59.1 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Other health impairment | 105 | 353 | 540.8 | 670 | 66.5 | 102 | 363 | 503.3 | 707 | 71.4 |
|  | Specific learning disability | 381 | 301 | 547.6 | 677 | 58.6 | 381 | 349 | 502.6 | 720 | 59.0 |
|  | Speech or language impairment | 91 | 441 | 583.1 | 696 | 47.8 | 93 | 368 | 556.2 | 648 | 52.9 |
|  | Traumatic brain injury | 1 |  |  |  |  | 0 |  |  |  |  |
|  | Visual impairment | 0 |  |  |  |  | 0 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.4: Summative Scale Score Summary by Subgroup - Grade 3 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 5,837 | 3300 | 5488.1 | 6729 | 522.7 | 5,853 | 2968 | 5548.4 | 7156 | 571.7 |
| Gender | Female | 2,595 | 3300 | 5522.9 | 6729 | 518.9 | 2,602 | 2968 | 5593.9 | 7156 | 563.8 |
|  | Male | 3,216 | 3300 | 5461.2 | 6729 | 523.8 | 3,225 | 2968 | 5513.2 | 6805 | 574.7 |
|  | Missing | 26 | 4189 | 5343.9 | 6312 | 557.7 | 26 | 3997 | 5369.3 | 6184 | 656.0 |
| Ethnicity | American Indian or Alaskan Native | 11 | 3300 | 5179.5 | 6083 | 833.0 | 11 | 2968 | 5241.6 | 6224 | 951.4 |
|  | Asian | 995 | 3659 | 5601.8 | 6729 | 505.0 | 998 | 3648 | 5669.6 | 6932 | 538.7 |
|  | Black or African American | 1,205 | 3598 | 5476.1 | 6729 | 497.9 | 1,207 | 3326 | 5544.7 | 6794 | 536.7 |
|  | Hispanic or Latino | 1,890 | 3300 | 5440.9 | 6729 | 530.4 | 1,897 | 2968 | 5489.6 | 6737 | 586.4 |
|  | Native Hawaiian or Other Pacific Islander | 50 | 4723 | 5586.5 | 6571 | 420.6 | 50 | 4728 | 5684.5 | 6570 | 401.2 |
|  | Two or More Races | 883 | 3659 | 5407.1 | 6622 | 552.6 | 886 | 3648 | 5442.9 | 6727 | 617.6 |
|  | White | 795 | 3659 | 5563.7 | 6729 | 495.6 | 796 | 3648 | 5654.9 | 7156 | 532.7 |
|  | Other/Unknown | 8 |  |  |  |  | 8 |  |  |  |  |
| Other | Gifted | 30 | 5049 | 5829.1 | 6462 | 381.9 | 30 | 5068 | 5947.2 | 6678 | 357.1 |
|  | IEP | 800 | 3300 | 5179.3 | 6439 | 513.3 | 808 | 2968 | 5185.7 | 6687 | 555.5 |
|  | Migrant | 30 | 4206 | 5454.1 | 6622 | 688.3 | 30 | 4148 | 5463.9 | 6727 | 737.6 |
| Primary Disability | Autism | 90 | 3300 | 4851.5 | 6099 | 665.9 | 91 | 2968 | 4831.6 | 6128 | 723.5 |
|  | Developmental delay | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Emotional disturbance | 17 | 4379 | 5243.1 | 6201 | 452.6 | 18 | 3981 | 5251.9 | 6033 | 510.6 |
|  | Hearing Impaired | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Intellectual Disability | 42 | 4229 | 4921.7 | 5700 | 410.2 | 42 | 3912 | 4885.8 | 5638 | 402.6 |
|  | Multiple disabilities | 32 | 3300 | 4344.7 | 5072 | 363.9 | 34 | 2968 | 4272.6 | 5123 | 410.5 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Other health impairment | 111 | 4200 | 5221.5 | 6435 | 439.3 | 111 | 4020 | 5222.7 | 6623 | 504.7 |
|  | Specific learning disability | 399 | 4098 | 5220.5 | 6390 | 397.5 | 402 | 3818 | 5244.4 | 6687 | 431.8 |
|  | Speech or language impairment | 94 | 4330 | 5628.9 | 6439 | 391.2 | 95 | 4288 | 5642.9 | 6389 | 378.6 |
|  | Traumatic brain injury | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Visual impairment | 1 |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.5: Summative Scale Score Summary by Subgroup - Grade 4

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 4,383 | 213 | 526.8 | 717 | 76.4 | 4,288 | 228 | 523.6 | 719 | 68.7 |
| Gender | Female | 1,929 | 280 | 529.7 | 717 | 75.4 | 1,897 | 307 | 528.2 | 719 | 68.0 |
|  | Male | 2,400 | 213 | 524.9 | 703 | 76.9 | 2,338 | 228 | 520.4 | 707 | 68.8 |
|  | Missing | 54 | 348 | 505.9 | 711 | 82.1 | 53 | 381 | 503.4 | 699 | 74.5 |
| Ethnicity | American Indian or Alaskan Native | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Asian | 655 | 293 | 544.4 | 703 | 74.7 | 641 | 362 | 546.3 | 707 | 67.8 |
|  | Black or African American | 847 | 213 | 529.2 | 701 | 72.2 | 832 | 228 | 523.8 | 701 | 64.8 |
|  | Hispanic or Latino | 1,547 | 280 | 521.2 | 711 | 76.2 | 1,504 | 345 | 518.0 | 700 | 67.8 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 393 | 522.5 | 628 | 60.7 | 30 | 409 | 521.0 | 643 | 61.4 |
|  | Two or More Races | 681 | 291 | 517.2 | 692 | 81.0 | 663 | 340 | 511.3 | 693 | 69.7 |
|  | White | 606 | 220 | 529.3 | 699 | 76.3 | 601 | 237 | 526.8 | 707 | 70.1 |
|  | Other/Unknown | 8 |  |  |  |  | 8 |  |  |  |  |
| Other | Gifted | 21 | 453 | 561.5 | 670 | 67.9 | 21 | 427 | 549.3 | 666 | 71.0 |
|  | IEP | 816 | 213 | 495.2 | 675 | 73.8 | 722 | 228 | 490.2 | 651 | 59.7 |
|  | Migrant | 19 | 368 | 517.8 | 652 | 82.0 | 18 | 406 | 514.0 | 633 | 71.1 |
| Primary Disability | Autism | 85 | 213 | 437.8 | 644 | 96.6 | 59 | 228 | 473.6 | 651 | 74.7 |
|  | Deaf-blindness | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Developmental delay | 6 |  |  |  |  | 5 |  |  |  |  |
|  | Emotional disturbance | 11 | 441 | 512.4 | 583 | 48.5 | 11 | 428 | 477.8 | 564 | 40.1 |
|  | Hearing Impaired | 7 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 51 | 283 | 433.7 | 558 | 61.1 | 33 | 373 | 437.6 | 520 | 39.0 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 23 | 280 | 367.7 | 478 | 42.2 | 9 |  |  |  |  |
|  | Orthopedic impairment | 5 |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 102 | 316 | 496.2 | 659 | 63.2 | 93 | 313 | 486.1 | 647 | 63.9 |
|  | Specific learning disability | 466 | 354 | 513.1 | 675 | 58.1 | 444 | 374 | 493.8 | 649 | 54.0 |
|  | Speech or language impairment | 53 | 368 | 543.9 | 634 | 48.5 | 50 | 435 | 534.5 | 608 | 43.5 |
|  | Traumatic brain injury | 3 |  |  |  |  | 2 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.5: Summative Scale Score Summary by Subgroup - Grade 4 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 4,242 | 237 | 547.0 | 723 | 78.8 | 4,264 | 221 | 519.9 | 722 | 75.4 |
| Gender | Female | 1,880 | 273 | 552.9 | 723 | 78.6 | 1,880 | 305 | 526.8 | 712 | 73.8 |
|  | Male | 2,309 | 237 | 542.7 | 712 | 78.5 | 2,330 | 221 | 515.0 | 699 | 75.9 |
|  | Missing | 53 | 340 | 522.7 | 698 | 88.4 | 54 | 319 | 497.4 | 722 | 89.1 |
| Ethnicity | American Indian or Alaskan Native | 9 |  |  |  |  | 8 |  |  |  |  |
|  | Asian | 632 | 282 | 563.2 | 718 | 69.8 | 642 | 330 | 541.4 | 694 | 70.4 |
|  | Black or African American | 824 | 237 | 550.9 | 698 | 72.8 | 827 | 221 | 522.8 | 698 | 71.1 |
|  | Hispanic or Latino | 1,493 | 277 | 539.9 | 700 | 81.1 | 1,497 | 315 | 512.7 | 722 | 76.3 |
|  | Native Hawaiian or Other Pacific Islander | 29 | 410 | 551.5 | 631 | 62.9 | 30 | 366 | 529.6 | 631 | 61.3 |
|  | Two or More Races | 658 | 285 | 534.3 | 723 | 86.1 | 662 | 315 | 505.8 | 680 | 79.4 |
|  | White | 589 | 263 | 556.1 | 717 | 78.1 | 590 | 230 | 526.3 | 699 | 74.1 |
|  | Other/Unknown | 8 |  |  |  |  | 8 |  |  |  |  |
| Other | Gifted | 19 | 490 | 585.8 | 669 | 53.8 | 21 | 405 | 539.4 | 659 | 66.9 |
|  | IEP | 739 | 237 | 525.4 | 675 | 71.5 | 729 | 221 | 484.6 | 659 | 67.1 |
|  | Migrant | 19 | 362 | 524.1 | 618 | 75.8 | 19 | 368 | 495.8 | 637 | 81.3 |
| Primary Disability | Autism | 53 | 237 | 473.1 | 622 | 84.0 | 56 | 221 | 459.1 | 641 | 86.8 |
|  | Deaf-blindness | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Developmental delay | 6 |  |  |  |  | 5 |  |  |  |  |
|  | Emotional disturbance | 11 | 439 | 530.0 | 608 | 46.7 | 11 | 386 | 475.5 | 619 | 65.9 |
|  | Hearing Impaired | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 40 | 296 | 441.3 | 561 | 66.2 | 35 | 327 | 419.5 | 518 | 55.2 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 6 |  |  |  |  | 8 |  |  |  |  |
|  | Orthopedic impairment | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Other health impairment | 97 | 279 | 523.6 | 675 | 78.3 | 95 | 320 | 479.1 | 639 | 73.3 |
|  | Specific learning disability | 458 | 298 | 539.2 | 668 | 57.6 | 449 | 348 | 492.5 | 659 | 58.6 |
|  | Speech or language impairment | 49 | 359 | 561.6 | 650 | 49.0 | 51 | 391 | 522.0 | 617 | 44.2 |
|  | Traumatic brain injury | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.5: Summative Scale Score Summary by Subgroup - Grade 4 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 4,402 | 3298 | 5317.0 | 6878 | 531.1 | 4,419 | 2892 | 5326.3 | 6800 | 582.8 |
| Gender | Female | 1,937 | 3632 | 5338.5 | 6878 | 526.6 | 1,943 | 3538 | 5370.3 | 6800 | 574.1 |
|  | Male | 2,411 | 3298 | 5303.2 | 6741 | 533.8 | 2,422 | 2892 | 5294.8 | 6664 | 585.6 |
|  | Missing | 54 | 4160 | 5167.4 | 6558 | 540.2 | 54 | 3856 | 5157.7 | 6613 | 653.5 |
| Ethnicity | American Indian or Alaskan Native | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Asian | 658 | 3734 | 5465.5 | 6741 | 541.3 | 658 | 3730 | 5478.8 | 6608 | 557.2 |
|  | Black or African American | 848 | 3298 | 5320.7 | 6878 | 500.0 | 848 | 2892 | 5346.8 | 6606 | 546.4 |
|  | Hispanic or Latino | 1,554 | 3632 | 5279.8 | 6585 | 524.3 | 1,565 | 3616 | 5275.3 | 6613 | 586.1 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 4471 | 5262.2 | 6228 | 433.1 | 30 | 4251 | 5352.8 | 6036 | 465.1 |
|  | Two or More Races | 682 | 3715 | 5245.8 | 6686 | 548.0 | 686 | 3724 | 5226.9 | 6671 | 612.8 |
|  | White | 613 | 3298 | 5328.4 | 6741 | 532.8 | 615 | 3005 | 5374.1 | 6664 | 580.6 |
|  | Other/Unknown | 8 |  |  |  |  | 8 |  |  |  |  |
| Other | Gifted | 21 | 4739 | 5583.3 | 6514 | 554.2 | 21 | 4657 | 5573.5 | 6455 | 511.8 |
|  | IEP | 821 | 3298 | 5070.5 | 6413 | 495.6 | 826 | 2892 | 5050.8 | 6402 | 536.9 |
|  | Migrant | 19 | 4473 | 5315.0 | 6428 | 585.4 | 19 | 4202 | 5207.9 | 6073 | 597.7 |
| Primary Disability | Autism | 86 | 3298 | 4736.8 | 6305 | 652.0 | 87 | 2892 | 4654.8 | 6215 | 673.0 |
|  | Deaf-blindness | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Developmental delay | 6 |  |  |  |  | 7 |  |  |  |  |
|  | Emotional disturbance | 11 | 4683 | 5103.9 | 5541 | 291.4 | 11 | 4578 | 5090.5 | 5797 | 369.3 |
|  | Hearing Impaired | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 51 | 3665 | 4698.2 | 5537 | 380.8 | 51 | 3673 | 4564.1 | 5385 | 421.1 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 23 | 3632 | 4264.8 | 5230 | 315.2 | 23 | 3616 | 4159.7 | 4996 | 332.2 |
|  | Orthopedic impairment | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Other health impairment | 102 | 3779 | 5076.3 | 6345 | 428.8 | 102 | 3638 | 5062.6 | 6229 | 521.5 |
|  | Specific learning disability | 469 | 4223 | 5163.8 | 6387 | 407.4 | 472 | 4073 | 5179.1 | 6402 | 423.8 |
|  | Speech or language impairment | 53 | 4746 | 5463.3 | 6413 | 349.5 | 53 | 4520 | 5431.7 | 5982 | 311.6 |
|  | Traumatic brain injury | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.6: Summative Scale Score Summary by Subgroup - Grade 5

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,951 | 213 | 538.1 | 718 | 82.6 | 3,829 | 228 | 539.9 | 719 | 73.4 |
| Gender | Female | 1,790 | 258 | 540.5 | 704 | 82.4 | 1,748 | 344 | 543.4 | 712 | 72.8 |
|  | Male | 2,109 | 213 | 535.9 | 718 | 82.5 | 2,030 | 228 | 536.7 | 719 | 73.9 |
|  | Missing | 52 | 277 | 541.1 | 693 | 94.3 | 51 | 393 | 543.4 | 703 | 75.8 |
| Ethnicity | American Indian or Alaskan Native | 10 | 354 | 493.9 | 627 | 81.5 | 10 | 388 | 511.8 | 640 | 73.7 |
|  | Asian | 582 | 258 | 548.7 | 718 | 80.4 | 564 | 367 | 552.4 | 719 | 71.6 |
|  | Black or African American | 773 | 213 | 531.8 | 699 | 84.7 | 753 | 228 | 534.0 | 718 | 74.7 |
|  | Hispanic or Latino | 1,428 | 258 | 535.5 | 704 | 82.2 | 1,376 | 330 | 538.7 | 709 | 73.3 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 344 | 531.7 | 673 | 86.3 | 27 | 370 | 541.1 | 675 | 65.6 |
|  | Two or More Races | 625 | 258 | 534.1 | 692 | 81.7 | 606 | 364 | 531.0 | 681 | 70.3 |
|  | White | 495 | 258 | 547.9 | 692 | 82.6 | 485 | 331 | 548.6 | 711 | 75.8 |
|  | Other/Unknown | 8 |  |  |  |  | 8 |  |  |  |  |
| Other | Gifted | 12 | 406 | 581.7 | 666 | 77.2 | 13 | 465 | 575.9 | 675 | 64.7 |
|  | IEP | 810 | 213 | 514.1 | 685 | 78.6 | 701 | 228 | 516.3 | 709 | 63.2 |
|  | Migrant | 17 | 378 | 522.7 | 654 | 88.1 | 16 | 414 | 539.2 | 669 | 84.6 |
| Primary Disability | Autism | 57 | 213 | 449.0 | 685 | 95.8 | 31 | 228 | 492.5 | 661 | 84.2 |
|  | Developmental delay | 6 |  |  |  |  | 4 |  |  |  |  |
|  | Emotional disturbance | 15 | 371 | 512.3 | 645 | 82.6 | 15 | 409 | 500.7 | 662 | 79.5 |
|  | Hearing Impaired | 6 |  |  |  |  | 9 |  |  |  |  |
|  | Intellectual Disability | 63 | 314 | 446.4 | 612 | 60.7 | 40 | 378 | 456.8 | 585 | 47.4 |
|  | Multiple disabilities | 37 | 258 | 360.1 | 536 | 63.1 | 5 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 6 |  |  |  |  | 5 |  |  |  |  |
|  | Other health impairment | 102 | 354 | 521.7 | 685 | 67.4 | 95 | 354 | 514.9 | 674 | 63.7 |
|  | Specific learning disability | 481 | 371 | 536.7 | 672 | 57.3 | 460 | 367 | 522.6 | 709 | 57.9 |
|  | Speech or language impairment | 28 | 373 | 563.9 | 677 | 66.9 | 28 | 452 | 558.1 | 669 | 55.5 |
|  | Traumatic brain injury | 6 |  |  |  |  | 3 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.6: Summative Scale Score Summary by Subgroup - Grade 5 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,801 | 237 | 557.3 | 742 | 82.5 | 3,799 | 221 | 536.5 | 724 | 79.5 |
| Gender | Female | 1,717 | 283 | 561.5 | 742 | 82.6 | 1,730 | 304 | 541.7 | 720 | 78.9 |
|  | Male | 2,033 | 237 | 554.2 | 729 | 82.1 | 2,018 | 221 | 532.0 | 724 | 79.6 |
|  | Missing | 51 | 318 | 543.6 | 695 | 89.1 | 51 | 356 | 536.8 | 663 | 87.4 |
| Ethnicity | American Indian or Alaskan Native | 10 | 361 | 508.2 | 630 | 97.8 | 10 | 355 | 503.0 | 659 | 91.2 |
|  | Asian | 558 | 285 | 567.5 | 705 | 74.3 | 563 | 332 | 548.5 | 720 | 75.1 |
|  | Black or African American | 754 | 237 | 554.4 | 742 | 82.3 | 750 | 221 | 531.2 | 711 | 81.4 |
|  | Hispanic or Latino | 1,379 | 282 | 554.4 | 725 | 83.9 | 1,356 | 325 | 533.9 | 714 | 80.0 |
|  | Native Hawaiian or Other Pacific Islander | 29 | 336 | 541.3 | 650 | 93.0 | 28 | 344 | 541.3 | 675 | 79.7 |
|  | Two or More Races | 589 | 288 | 551.8 | 729 | 85.7 | 603 | 304 | 529.3 | 708 | 79.2 |
|  | White | 474 | 297 | 566.6 | 712 | 81.9 | 481 | 328 | 546.6 | 724 | 78.7 |
|  | Other/Unknown | 8 |  |  |  |  | 8 |  |  |  |  |
| Other | Gifted | 13 | 463 | 586.8 | 668 | 54.7 | 13 | 460 | 563.8 | 632 | 59.9 |
|  | IEP | 726 | 237 | 548.8 | 719 | 68.7 | 707 | 221 | 516.1 | 695 | 66.0 |
|  | Migrant | 16 | 385 | 550.6 | 714 | 106.7 | 16 | 354 | 523.0 | 646 | 94.6 |
| Primary Disability | Autism | 32 | 237 | 505.4 | 719 | 98.3 | 30 | 221 | 483.7 | 667 | 94.1 |
|  | Developmental delay | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Emotional disturbance | 15 | 410 | 544.2 | 651 | 72.9 | 16 | 354 | 496.2 | 640 | 80.8 |
|  | Hearing Impaired | 7 |  |  |  |  | 9 |  |  |  |  |
|  | Intellectual Disability | 50 | 336 | 482.8 | 634 | 66.2 | 39 | 358 | 451.7 | 595 | 58.1 |
|  | Multiple disabilities | 9 |  |  |  |  | 5 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 94 | 340 | 544.9 | 691 | 65.0 | 95 | 339 | 512.9 | 691 | 66.6 |
|  | Specific learning disability | 472 | 373 | 562.3 | 712 | 57.1 | 468 | 343 | 524.5 | 695 | 58.0 |
|  | Speech or language impairment | 29 | 494 | 571.4 | 638 | 40.0 | 28 | 453 | 559.1 | 679 | 45.6 |
|  | Traumatic brain injury | 4 |  |  |  |  | 3 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.6: Summative Scale Score Summary by Subgroup - Grade 5 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,965 | 3298 | 5411.3 | 6878 | 581.0 | 3,994 | 2892 | 5429.0 | 6774 | 626.8 |
| Gender | Female | 1,798 | 3482 | 5426.1 | 6878 | 575.7 | 1,806 | 3505 | 5461.2 | 6726 | 624.0 |
|  | Male | 2,115 | 3298 | 5397.4 | 6776 | 582.8 | 2,136 | 2892 | 5402.2 | 6774 | 626.2 |
|  | Missing | 52 | 3622 | 5461.5 | 6878 | 678.2 | 52 | 3629 | 5410.1 | 6640 | 703.7 |
| Ethnicity | American Indian or Alaskan Native | 10 | 4233 | 5145.3 | 5973 | 521.1 | 10 | 3994 | 5134.3 | 6211 | 681.1 |
|  | Asian | 586 | 3482 | 5494.1 | 6878 | 578.0 | 588 | 3505 | 5514.9 | 6771 | 599.7 |
|  | Black or African American | 775 | 3298 | 5362.5 | 6779 | 590.4 | 778 | 2892 | 5386.5 | 6774 | 640.8 |
|  | Hispanic or Latino | 1,432 | 3482 | 5401.6 | 6878 | 577.9 | 1,445 | 3505 | 5413.5 | 6726 | 625.7 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 4148 | 5354.2 | 6342 | 563.0 | 31 | 3910 | 5374.2 | 6371 | 647.7 |
|  | Two or More Races | 626 | 3482 | 5366.7 | 6634 | 556.5 | 630 | 3505 | 5381.3 | 6722 | 621.7 |
|  | White | 498 | 3482 | 5474.3 | 6758 | 595.3 | 504 | 3505 | 5501.2 | 6737 | 631.3 |
|  | Other/Unknown | 8 |  |  |  |  | 8 |  |  |  |  |
| Other | Gifted | 13 | 4625 | 5767.8 | 6878 | 624.2 | 13 | 4671 | 5717.4 | 6318 | 472.3 |
|  | IEP | 814 | 3298 | 5206.0 | 6665 | 547.8 | 825 | 2892 | 5225.5 | 6592 | 569.9 |
|  | Migrant | 17 | 4464 | 5360.7 | 6314 | 599.4 | 17 | 4227 | 5367.7 | 6488 | 723.4 |
| Primary Disability | Autism | 57 | 3298 | 4800.7 | 6300 | 644.1 | 57 | 2892 | 4774.9 | 6586 | 691.2 |
|  | Developmental delay | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Emotional disturbance | 15 | 4383 | 5217.7 | 6654 | 652.9 | 16 | 4182 | 5208.4 | 6296 | 616.2 |
|  | Hearing Impaired | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Intellectual Disability | 63 | 4047 | 4760.7 | 5819 | 393.3 | 65 | 3910 | 4724.0 | 5976 | 423.9 |
|  | Multiple disabilities | 38 | 3482 | 4229.8 | 5351 | 460.9 | 38 | 3505 | 4172.9 | 5384 | 428.3 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Other health impairment | 102 | 4151 | 5259.2 | 6534 | 488.3 | 103 | 3974 | 5271.9 | 6454 | 508.9 |
|  | Specific learning disability | 481 | 4412 | 5348.0 | 6498 | 424.4 | 486 | 4170 | 5395.1 | 6592 | 425.9 |
|  | Speech or language impairment | 28 | 4687 | 5603.1 | 6665 | 502.2 | 29 | 4779 | 5619.7 | 6335 | 355.1 |
|  | Traumatic brain injury | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  | 4 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.7: Summative Scale Score Summary by Subgroup - Grade 6

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,343 | 232 | 520.7 | 721 | 72.0 | 3,247 | 247 | 522.1 | 743 | 63.8 |
| Gender | Female | 1,450 | 232 | 519.7 | 700 | 70.2 | 1,420 | 247 | 521.6 | 727 | 62.0 |
|  | Male | 1,863 | 268 | 521.9 | 721 | 73.5 | 1,797 | 291 | 522.9 | 743 | 65.3 |
|  | Missing | 30 | 353 | 495.1 | 602 | 63.9 | 30 | 391 | 504.9 | 617 | 56.2 |
| Ethnicity | American Indian or Alaskan Native | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Asian | 471 | 232 | 535.2 | 692 | 75.7 | 459 | 247 | 539.1 | 697 | 68.0 |
|  | Black or African American | 683 | 268 | 520.2 | 692 | 67.8 | 663 | 380 | 521.4 | 699 | 61.7 |
|  | Hispanic or Latino | 1,166 | 268 | 514.4 | 683 | 74.3 | 1,129 | 343 | 516.4 | 708 | 63.6 |
|  | Native Hawaiian or Other Pacific Islander | 23 | 422 | 515.5 | 613 | 57.5 | 23 | 435 | 509.2 | 592 | 56.6 |
|  | Two or More Races | 533 | 268 | 514.0 | 658 | 69.6 | 516 | 371 | 514.6 | 699 | 59.7 |
|  | White | 452 | 356 | 530.3 | 721 | 68.3 | 443 | 352 | 529.3 | 743 | 64.3 |
|  | Other/Unknown | 7 |  |  |  |  | 6 |  |  |  |  |
| Other | Gifted | 8 |  |  |  |  | 7 |  |  |  |  |
|  | Home Schooled | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 691 | 232 | 499.3 | 650 | 66.4 | 618 | 247 | 500.1 | 675 | 52.9 |
|  | Migrant | 16 | 370 | 488.4 | 658 | 92.0 | 17 | 415 | 512.2 | 674 | 82.7 |
| Primary Disability | Autism | 49 | 268 | 442.9 | 619 | 85.8 | 31 | 389 | 487.6 | 620 | 68.3 |
|  | Developmental delay | 4 |  |  |  |  | 1 |  |  |  |  |
|  | Emotional disturbance | 18 | 383 | 491.8 | 640 | 63.5 | 16 | 408 | 503.7 | 675 | 62.9 |
|  | Hearing Impaired | 4 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 62 | 340 | 455.7 | 593 | 57.5 | 48 | 403 | 470.2 | 635 | 54.3 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 27 | 232 | 362.5 | 479 | 59.3 | 13 | 247 | 414.4 | 492 | 68.9 |
|  | Other health impairment | 80 | 358 | 507.6 | 605 | 51.1 | 76 | 392 | 499.3 | 624 | 49.0 |
|  | Specific learning disability | 429 | 383 | 520.0 | 650 | 48.8 | 407 | 402 | 507.4 | 675 | 46.6 |
|  | Speech or language impairment | 13 | 420 | 520.8 | 604 | 52.9 | 14 | 445 | 519.6 | 614 | 58.4 |
|  | Traumatic brain injury | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.7: Summative Scale Score Summary by Subgroup - Grade 6 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,210 | 268 | 550.7 | 745 | 72.9 | 3,235 | 243 | 514.4 | 725 | 72.3 |
| Gender | Female | 1,402 | 268 | 553.8 | 740 | 72.5 | 1,416 | 243 | 518.2 | 725 | 71.0 |
|  | Male | 1,778 | 294 | 548.7 | 745 | 73.2 | 1,790 | 288 | 511.9 | 698 | 73.4 |
|  | Missing | 30 | 336 | 529.3 | 626 | 74.5 | 29 | 336 | 490.2 | 579 | 62.0 |
| Ethnicity | American Indian or Alaskan Native | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Asian | 450 | 268 | 569.2 | 717 | 72.7 | 456 | 243 | 530.1 | 703 | 70.5 |
|  | Black or African American | 659 | 313 | 550.3 | 700 | 65.1 | 665 | 319 | 514.8 | 725 | 68.0 |
|  | Hispanic or Latino | 1,124 | 312 | 542.1 | 720 | 78.1 | 1,126 | 318 | 506.1 | 687 | 76.1 |
|  | Native Hawaiian or Other Pacific Islander | 22 | 471 | 549.1 | 643 | 50.4 | 23 | 375 | 507.6 | 621 | 62.0 |
|  | Two or More Races | 513 | 317 | 540.3 | 675 | 73.6 | 514 | 331 | 506.6 | 668 | 71.1 |
|  | White | 429 | 316 | 566.4 | 745 | 64.4 | 438 | 329 | 527.5 | 698 | 68.2 |
|  | Other/Unknown | 6 |  |  |  |  | 6 |  |  |  |  |
| Other | Gifted | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Home Schooled | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 629 | 268 | 535.5 | 704 | 63.7 | 620 | 243 | 492.6 | 657 | 65.0 |
|  | Migrant | 16 | 325 | 495.4 | 619 | 97.7 | 16 | 342 | 470.6 | 687 | 101.5 |
| Primary Disability | Autism | 31 | 349 | 491.7 | 606 | 78.9 | 32 | 331 | 451.4 | 612 | 88.9 |
|  | Developmental delay | 2 |  |  |  |  | 1 |  |  |  |  |
|  | Emotional disturbance | 16 | 450 | 528.0 | 641 | 46.9 | 17 | 374 | 491.5 | 618 | 58.8 |
|  | Hearing Impaired | 3 |  |  |  |  | 5 |  |  |  |  |
|  | Intellectual Disability | 54 | 326 | 485.2 | 595 | 64.3 | 50 | 340 | 446.9 | 622 | 69.7 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 12 | 268 | 412.4 | 522 | 78.6 | 12 | 243 | 356.8 | 466 | 60.2 |
|  | Other health impairment | 76 | 316 | 535.1 | 627 | 54.4 | 76 | 333 | 494.1 | 596 | 62.1 |
|  | Specific learning disability | 417 | 356 | 551.0 | 704 | 51.4 | 408 | 349 | 506.1 | 657 | 51.9 |
|  | Speech or language impairment | 12 | 409 | 533.2 | 632 | 73.5 | 13 | 387 | 513.7 | 583 | 59.5 |
|  | Traumatic brain injury | 4 |  |  |  |  | 5 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.7: Summative Scale Score Summary by Subgroup - Grade 6 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,358 | 3361 | 5286.8 | 6938 | 501.0 | 3,365 | 3052 | 5308.3 | 6932 | 546.7 |
| Gender | Female | 1,455 | 3361 | 5272.8 | 6665 | 478.1 | 1,458 | 3052 | 5324.1 | 6834 | 531.6 |
|  | Male | 1,873 | 3553 | 5299.9 | 6938 | 518.3 | 1,877 | 3402 | 5298.8 | 6932 | 558.7 |
|  | Missing | 30 | 4171 | 5145.1 | 6161 | 457.9 | 30 | 4109 | 5135.8 | 5807 | 477.5 |
| Ethnicity | American Indian or Alaskan Native | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Asian | 472 | 3361 | 5397.2 | 6580 | 540.0 | 474 | 3052 | 5429.4 | 6636 | 575.9 |
|  | Black or African American | 685 | 3553 | 5284.1 | 6711 | 482.9 | 686 | 3560 | 5307.9 | 6597 | 507.4 |
|  | Hispanic or Latino | 1,172 | 3553 | 5249.2 | 6938 | 505.5 | 1,175 | 3560 | 5256.3 | 6557 | 566.0 |
|  | Native Hawaiian or Other Pacific Islander | 23 | 4576 | 5215.1 | 5815 | 382.4 | 23 | 4580 | 5260.8 | 5950 | 416.8 |
|  | Two or More Races | 537 | 3553 | 5234.3 | 6622 | 474.1 | 537 | 3560 | 5240.0 | 6429 | 528.5 |
|  | White | 454 | 4177 | 5336.9 | 6938 | 488.7 | 455 | 3870 | 5396.5 | 6932 | 515.9 |
|  | Other/Unknown | 7 |  |  |  |  | 7 |  |  |  |  |
| Other | Gifted | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Home Schooled | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 699 | 3361 | 5110.9 | 6711 | 443.4 | 701 | 3052 | 5114.3 | 6265 | 495.9 |
|  | Migrant | 17 | 4395 | 5191.9 | 6258 | 625.3 | 17 | 4068 | 5062.6 | 6355 | 734.6 |
| Primary Disability | Autism | 49 | 3553 | 4794.4 | 6043 | 592.6 | 49 | 3560 | 4717.3 | 6001 | 627.8 |
|  | Developmental delay | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Emotional disturbance | 18 | 4467 | 5129.4 | 6476 | 452.4 | 18 | 4387 | 5121.2 | 6265 | 402.0 |
|  | Hearing Impaired | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 63 | 4223 | 4852.1 | 6326 | 391.9 | 64 | 4027 | 4766.1 | 5834 | 444.6 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 28 | 3361 | 4266.3 | 5033 | 426.3 | 28 | 3052 | 4148.7 | 5011 | 448.5 |
|  | Other health impairment | 80 | 4299 | 5153.8 | 5928 | 341.2 | 80 | 3870 | 5160.1 | 5840 | 404.6 |
|  | Specific learning disability | 432 | 4471 | 5232.5 | 6711 | 350.6 | 433 | 4189 | 5268.2 | 6242 | 363.8 |
|  | Speech or language impairment | 14 | 4726 | 5275.7 | 5809 | 375.5 | 14 | 4471 | 5296.1 | 5919 | 441.4 |
|  | Traumatic brain injury | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.8: Summative Scale Score Summary by Subgroup - Grade 7

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,224 | 261 | 526.2 | 723 | 78.1 | 3,169 | 263 | 529.5 | 736 | 69.1 |
| Gender | Female | 1,434 | 266 | 526.1 | 708 | 78.9 | 1,415 | 322 | 532.8 | 732 | 69.5 |
|  | Male | 1,772 | 261 | 526.7 | 723 | 77.1 | 1,737 | 263 | 527.1 | 736 | 68.5 |
|  | Missing | 18 | 267 | 490.9 | 634 | 104.2 | 17 | 276 | 500.9 | 667 | 94.0 |
| Ethnicity | American Indian or Alaskan Native | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Asian | 435 | 281 | 540.8 | 691 | 69.2 | 429 | 392 | 543.8 | 689 | 65.1 |
|  | Black or African American | 698 | 268 | 532.5 | 723 | 74.8 | 689 | 367 | 537.5 | 736 | 66.7 |
|  | Hispanic or Latino | 1,143 | 261 | 517.7 | 708 | 81.3 | 1,113 | 263 | 520.2 | 719 | 69.8 |
|  | Native Hawaiian or Other Pacific Islander | 31 | 372 | 533.4 | 679 | 70.5 | 31 | 367 | 530.4 | 680 | 68.6 |
|  | Two or More Races | 522 | 268 | 510.4 | 702 | 80.5 | 514 | 344 | 515.6 | 701 | 69.8 |
|  | White | 388 | 353 | 545.1 | 694 | 73.2 | 386 | 386 | 544.8 | 711 | 67.6 |
|  | Other/Unknown | 2 |  |  |  |  | 2 |  |  |  |  |
| Other | Gifted | 9 |  |  |  |  | 9 |  |  |  |  |
|  | IEP | 633 | 268 | 515.6 | 656 | 68.0 | 590 | 390 | 515.5 | 689 | 56.3 |
|  | Migrant | 11 | 395 | 522.6 | 677 | 98.2 | 11 | 413 | 528.8 | 697 | 101.3 |
| Primary Disability | Autism | 25 | 281 | 467.7 | 618 | 75.3 | 19 | 404 | 503.0 | 645 | 68.0 |
|  | Developmental delay | 5 |  |  |  |  | 3 |  |  |  |  |
|  | Emotional disturbance | 8 |  |  |  |  | 7 |  |  |  |  |
|  | Hearing Impaired | 3 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 52 | 363 | 458.8 | 581 | 56.6 | 40 | 392 | 473.9 | 564 | 46.9 |
|  | Multiple disabilities | 22 | 268 | 395.5 | 493 | 53.8 | 12 | 393 | 432.1 | 487 | 27.3 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 4 |  |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 100 | 288 | 518.7 | 652 | 64.4 |  | 95 | 390 | 515.9 | 658 | 51.7 |
|  | Specific learning disability | 387 | 355 | 534.6 | 656 | 53.8 |  | 376 | 396 | 523.2 | 689 | 52.4 |
|  | Speech or language impairment | 13 | 420 | 542.5 | 629 | 61.2 |  | 13 | 450 | 539.6 | 645 | 56.1 |
|  | Traumatic brain injury | 9 |  |  |  |  |  | 8 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.8: Summative Scale Score Summary by Subgroup - Grade 7 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,097 | 278 | 551.5 | 739 | 81.1 | 3,131 | 260 | 521.7 | 748 | 80.9 |
| Gender | Female | 1,377 | 292 | 555.4 | 739 | 83.7 | 1,399 | 284 | 527.4 | 710 | 81.8 |
|  | Male | 1,704 | 278 | 548.6 | 713 | 78.4 | 1,714 | 260 | 517.4 | 748 | 79.6 |
|  | Missing | 16 | 286 | 524.1 | 644 | 115.5 | 18 | 293 | 498.3 | 642 | 102.5 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 5 |  |  |  |  |
|  | Asian | 422 | 293 | 571.3 | 708 | 70.2 | 425 | 337 | 535.4 | 688 | 70.8 |
|  | Black or African American | 667 | 318 | 559.6 | 713 | 72.2 | 677 | 334 | 531.2 | 748 | 74.5 |
|  | Hispanic or Latino | 1,109 | 278 | 541.5 | 739 | 87.7 | 1,102 | 260 | 512.6 | 702 | 85.0 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 396 | 552.1 | 658 | 57.9 | 31 | 336 | 525.2 | 671 | 75.7 |
|  | Two or More Races | 494 | 313 | 529.5 | 688 | 86.4 | 508 | 329 | 503.3 | 700 | 86.8 |
|  | White | 369 | 323 | 574.4 | 715 | 68.2 | 381 | 329 | 541.1 | 692 | 73.5 |
|  | Other/Unknown | 2 |  |  |  |  | 2 |  |  |  |  |
| Other | Gifted | 9 |  |  |  |  | 9 |  |  |  |  |
|  | IEP | 589 | 293 | 548.4 | 708 | 66.3 | 591 | 300 | 512.3 | 661 | 66.9 |
|  | Migrant | 10 | 344 | 525.1 | 672 | 115.0 | 11 | 341 | 502.6 | 682 | 112.8 |
| Primary Disability | Autism | 21 | 293 | 517.7 | 617 | 87.1 | 19 | 356 | 494.3 | 615 | 74.1 |
|  | Developmental delay | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Emotional disturbance | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Hearing Impaired | 3 |  |  |  |  | 5 |  |  |  |  |
|  | Intellectual Disability | 43 | 320 | 502.4 | 604 | 69.3 | 43 | 329 | 448.8 | 605 | 73.8 |
|  | Multiple disabilities | 13 | 302 | 416.0 | 537 | 74.7 | 13 | 300 | 391.6 | 513 | 70.1 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 3 |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 98 | 324 | 551.8 | 646 | 63.5 | 93 | 352 | 512.1 | 630 | 65.1 |
|  | Specific learning disability | 376 | 328 | 561.6 | 708 | 54.7 | 380 | 342 | 525.6 | 661 | 55.5 |
|  | Speech or language impairment | 11 | 461 | 554.6 | 629 | 52.0 | 13 | 452 | 537.1 | 649 | 54.5 |
|  | Traumatic brain injury | 6 |  |  |  |  | 7 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.8: Summative Scale Score Summary by Subgroup - Grade 7 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,238 | 3480 | 5334.6 | 6824 | 534.8 | 3,253 | 3171 | 5354.4 | 6865 | 601.3 |
| Gender | Female | 1,440 | 3553 | 5336.9 | 6802 | 534.7 | 1,445 | 3437 | 5381.2 | 6820 | 611.8 |
|  | Male | 1,780 | 3531 | 5335.0 | 6824 | 532.8 | 1,790 | 3171 | 5335.2 | 6865 | 589.4 |
|  | Missing | 18 | 3480 | 5109.6 | 6225 | 699.9 | 18 | 3312 | 5124.2 | 6274 | 820.4 |
| Ethnicity | American Indian or Alaskan Native | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Asian | 438 | 3732 | 5438.0 | 6615 | 494.6 | 439 | 3473 | 5481.2 | 6640 | 531.5 |
|  | Black or African American | 700 | 3553 | 5381.8 | 6761 | 523.8 | 703 | 3560 | 5414.8 | 6865 | 562.4 |
|  | Hispanic or Latino | 1,146 | 3480 | 5272.0 | 6824 | 541.0 | 1,153 | 3171 | 5286.6 | 6820 | 628.9 |
|  | Native Hawaiian or Other Pacific Islander | 31 | 4240 | 5373.1 | 6525 | 511.6 | 31 | 4009 | 5384.3 | 6429 | 515.7 |
|  | Two or More Races | 526 | 3553 | 5232.4 | 6703 | 542.3 | 527 | 3560 | 5205.7 | 6661 | 630.9 |
|  | White | 390 | 4169 | 5456.4 | 6824 | 522.0 | 393 | 3966 | 5505.3 | 6668 | 551.4 |
|  | Other/Unknown | 2 |  |  |  |  | 2 |  |  |  |  |
| Other | Gifted | 9 |  |  |  |  | 9 |  |  |  |  |
|  | IEP | 639 | 3553 | 5229.5 | 6723 | 468.8 | 644 | 3473 | 5256.0 | 6382 | 508.5 |
|  | Migrant | 11 | 4498 | 5363.2 | 6546 | 731.9 | 11 | 4111 | 5252.0 | 6446 | 826.5 |
| Primary Disability | Autism | 25 | 3732 | 4949.1 | 6138 | 529.4 | 25 | 3473 | 4967.7 | 6095 | 612.3 |
|  | Developmental delay | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Emotional disturbance | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Hearing Impaired | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Intellectual Disability | 52 | 4217 | 4872.1 | 5685 | 354.6 | 53 | 3951 | 4831.6 | 5670 | 469.9 |
|  | Multiple disabilities | 22 | 3553 | 4471.9 | 5045 | 313.2 | 22 | 3560 | 4327.8 | 5112 | 379.4 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 101 | 3699 | 5252.5 | 6447 | 446.7 | 103 | 3690 | 5287.6 | 6159 | 472.3 |
|  | Specific learning disability | 387 | 4359 | 5342.8 | 6723 | 396.2 | 389 | 4118 | 5394.0 | 6382 | 398.5 |
|  | Speech or language impairment | 13 | 4750 | 5441.2 | 6136 | 434.3 | 13 | 4711 | 5441.9 | 6055 | 429.8 |
|  | Traumatic brain injury | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.9: Summative Scale Score Summary by Subgroup - Grade 8

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,349 | 232 | 546.2 | 755 | 85.1 | 3,267 | 247 | 551.5 | 780 | 77.7 |
| Gender | Female | 1,417 | 268 | 547.7 | 716 | 84.5 | 1,391 | 362 | 554.1 | 738 | 76.8 |
|  | Male | 1,899 | 232 | 545.5 | 755 | 85.4 | 1,843 | 247 | 549.8 | 780 | 78.4 |
|  | Missing | 33 | 331 | 521.5 | 684 | 92.8 | 33 | 417 | 533.0 | 690 | 73.7 |
| Ethnicity | American Indian or Alaskan Native | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Asian | 493 | 370 | 564.7 | 755 | 74.9 | 486 | 394 | 568.5 | 780 | 73.9 |
|  | Black or African American | 662 | 325 | 549.1 | 735 | 82.0 | 659 | 367 | 552.3 | 747 | 78.1 |
|  | Hispanic or Latino | 1,196 | 268 | 540.7 | 742 | 87.8 | 1,151 | 362 | 545.9 | 747 | 77.2 |
|  | Native Hawaiian or Other Pacific Islander | 25 | 405 | 548.6 | 694 | 69.5 | 24 | 409 | 549.3 | 697 | 76.3 |
|  | Two or More Races | 559 | 301 | 533.2 | 711 | 92.0 | 549 | 367 | 540.6 | 719 | 81.9 |
|  | White | 402 | 296 | 554.0 | 713 | 78.5 | 386 | 362 | 561.8 | 726 | 70.8 |
|  | Other/Unknown | 6 |  |  |  |  | 6 |  |  |  |  |
| Other | Gifted | 6 |  |  |  |  | 6 |  |  |  |  |
|  | IEP | 595 | 268 | 534.4 | 685 | 75.7 | 541 | 383 | 535.3 | 703 | 67.5 |
|  | Migrant | 16 | 382 | 514.2 | 646 | 85.7 | 16 | 418 | 523.7 | 673 | 68.7 |
| Primary Disability | Autism | 32 | 268 | 486.8 | 649 | 95.6 | 26 | 416 | 523.4 | 663 | 73.6 |
|  | Developmental delay | 6 |  |  |  |  | 4 |  |  |  |  |
|  | Emotional disturbance | 13 | 442 | 539.3 | 645 | 59.9 | 13 | 456 | 539.1 | 630 | 62.3 |
|  | Hearing Impaired | 3 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 53 | 328 | 470.1 | 644 | 62.7 | 34 | 401 | 477.7 | 627 | 54.4 |
|  | Multiple disabilities | 24 | 268 | 405.1 | 537 | 58.6 | 12 | 384 | 440.4 | 504 | 32.9 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 4 |  |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 73 | 371 | 540.3 | 667 | 69.2 |  | 70 | 399 | 542.4 | 689 | 65.8 |
|  | Specific learning disability | 377 | 373 | 555.2 | 685 | 61.5 |  | 363 | 383 | 543.8 | 703 | 64.1 |
|  | Speech or language impairment | 5 |  |  |  |  |  | 5 |  |  |  |  |
|  | Traumatic brain injury | 1 |  |  |  |  |  | 1 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.9: Summative Scale Score Summary by Subgroup - Grade 8 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,222 | 268 | 567.8 | 766 | 83.3 | 3,254 | 243 | 542.1 | 776 | 86.7 |
| Gender | Female | 1,357 | 309 | 572.7 | 740 | 84.4 | 1,386 | 317 | 547.2 | 744 | 86.9 |
|  | Male | 1,833 | 268 | 564.3 | 766 | 82.5 | 1,836 | 243 | 538.6 | 776 | 86.4 |
|  | Missing | 32 | 402 | 558.4 | 687 | 69.5 | 32 | 332 | 527.0 | 697 | 87.0 |
| Ethnicity | American Indian or Alaskan Native | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Asian | 479 | 322 | 586.0 | 766 | 75.2 | 481 | 346 | 555.4 | 776 | 75.8 |
|  | Black or African American | 632 | 319 | 571.6 | 751 | 76.4 | 648 | 320 | 546.4 | 734 | 82.8 |
|  | Hispanic or Latino | 1,149 | 309 | 561.8 | 740 | 86.0 | 1,154 | 317 | 536.3 | 757 | 90.1 |
|  | Native Hawaiian or Other Pacific Islander | 24 | 411 | 563.3 | 658 | 61.0 | 25 | 360 | 546.2 | 702 | 76.5 |
|  | Two or More Races | 542 | 314 | 549.8 | 730 | 94.0 | 547 | 321 | 526.6 | 732 | 96.7 |
|  | White | 384 | 316 | 583.1 | 738 | 71.1 | 387 | 325 | 558.6 | 744 | 73.7 |
|  | Other/Unknown | 6 |  |  |  |  | 6 |  |  |  |  |
| Other | Gifted | 7 |  |  |  |  | 6 |  |  |  |  |
|  | IEP | 544 | 316 | 559.5 | 708 | 69.8 | 538 | 320 | 531.0 | 694 | 71.8 |
|  | Migrant | 12 | 359 | 541.8 | 691 | 99.1 | 16 | 386 | 511.3 | 637 | 78.2 |
| Primary Disability | Autism | 26 | 339 | 528.5 | 638 | 85.7 | 23 | 360 | 509.3 | 667 | 85.9 |
|  | Developmental delay | 5 |  |  |  |  | 4 |  |  |  |  |
|  | Emotional disturbance | 13 | 434 | 551.7 | 643 | 59.7 | 13 | 411 | 515.1 | 635 | 73.5 |
|  | Hearing Impaired | 3 |  |  |  |  | 5 |  |  |  |  |
|  | Intellectual Disability | 44 | 334 | 493.5 | 655 | 69.9 | 37 | 320 | 465.7 | 615 | 69.9 |
|  | Multiple disabilities | 11 | 316 | 439.5 | 554 | 80.8 | 11 | 324 | 403.1 | 521 | 64.3 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 4 |  |  |  |  |  | 3 |  |  |  |  |
|  | Other health impairment | 70 | 363 | 563.5 | 680 | 74.9 |  | 70 | 388 | 543.2 | 694 | 67.9 |
|  | Specific learning disability | 362 | 319 | 572.9 | 708 | 59.8 |  | 367 | 331 | 542.1 | 686 | 64.1 |
|  | Speech or language impairment | 4 |  |  |  |  |  | 3 |  |  |  |  |
|  | Traumatic brain injury | 0 |  |  |  |  |  | 0 |  |  |  |  |
|  | Visual impairment | 1 |  |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.9: Summative Scale Score Summary by Subgroup - Grade 8 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,366 | 3361 | 5489.2 | 6938 | 598.5 | 3,382 | 3052 | 5509.8 | 7242 | 648.7 |
| Gender | Female | 1,428 | 3553 | 5493.1 | 6938 | 583.1 | 1,434 | 3560 | 5539.1 | 6875 | 645.7 |
|  | Male | 1,905 | 3361 | 5489.5 | 6938 | 609.6 | 1,915 | 3052 | 5489.8 | 7242 | 650.5 |
|  | Missing | 33 | 4354 | 5308.4 | 6665 | 598.6 | 33 | 4143 | 5396.0 | 6520 | 637.1 |
| Ethnicity | American Indian or Alaskan Native | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Asian | 496 | 4282 | 5627.6 | 6761 | 558.4 | 499 | 3992 | 5642.3 | 7242 | 583.8 |
|  | Black or African American | 669 | 3955 | 5501.5 | 6938 | 590.9 | 671 | 3872 | 5529.5 | 7018 | 622.7 |
|  | Hispanic or Latino | 1,199 | 3553 | 5448.8 | 6938 | 601.5 | 1,205 | 3560 | 5467.6 | 6938 | 663.9 |
|  | Native Hawaiian or Other Pacific Islander | 25 | 4513 | 5495.1 | 6552 | 529.0 | 25 | 4248 | 5519.7 | 6504 | 541.4 |
|  | Two or More Races | 560 | 3783 | 5412.9 | 6825 | 632.8 | 561 | 3770 | 5402.1 | 6720 | 711.7 |
|  | White | 405 | 3753 | 5530.3 | 6825 | 563.6 | 409 | 3745 | 5594.4 | 6875 | 584.9 |
|  | Other/Unknown | 6 |  |  |  |  | 6 |  |  |  |  |
| Other | Gifted | 6 |  |  |  |  | 7 |  |  |  |  |
|  | IEP | 603 | 3553 | 5370.0 | 6824 | 549.3 | 609 | 3560 | 5383.7 | 6554 | 567.1 |
|  | Migrant | 16 | 4382 | 5278.3 | 6532 | 573.8 | 16 | 4263 | 5282.2 | 6356 | 635.0 |
| Primary Disability | Autism | 32 | 3553 | 5114.8 | 6610 | 703.9 | 33 | 3560 | 5074.4 | 6300 | 704.3 |
|  | Developmental delay | 6 |  |  |  |  | 7 |  |  |  |  |
|  | Emotional disturbance | 14 | 4801 | 5478.3 | 6406 | 502.0 | 14 | 4708 | 5391.4 | 6153 | 455.8 |
|  | Hearing Impaired | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 54 | 4155 | 4934.1 | 6169 | 415.8 | 57 | 3906 | 4926.7 | 6214 | 482.4 |
|  | Multiple disabilities | 26 | 3553 | 4530.9 | 5289 | 375.8 | 27 | 3560 | 4467.8 | 5315 | 424.4 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 4 |  |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 74 | 4304 | 5428.1 | 6429 | 499.9 |  | 74 | 4194 | 5475.9 | 6448 | 522.8 |
|  | Specific learning disability | 377 | 4373 | 5506.4 | 6824 | 473.7 |  | 378 | 3915 | 5533.3 | 6554 | 467.6 |
|  | Speech or language impairment | 5 |  |  |  |  |  | 5 |  |  |  |  |
|  | Traumatic brain injury | 1 |  |  |  |  |  | 1 |  |  |  |  |
|  | Visual impairment | 2 |  |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.10: Summative Scale Score Summary by Subgroup - Grade 9

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 4,157 | 253 | 520.7 | 762 | 78.5 | 4,149 | 258 | 520.8 | 777 | 71.0 |
| Gender | Female | 1,761 | 270 | 522.2 | 762 | 78.2 | 1,754 | 287 | 523.0 | 777 | 69.5 |
|  | Male | 2,364 | 253 | 519.3 | 727 | 78.5 | 2,360 | 258 | 519.0 | 743 | 71.8 |
|  | Missing | 32 | 388 | 533.5 | 671 | 89.4 | 35 | 413 | 534.7 | 674 | 81.4 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 551 | 253 | 555.3 | 718 | 68.6 | 551 | 258 | 553.0 | 734 | 67.5 |
|  | Black or African American | 982 | 270 | 524.3 | 762 | 74.7 | 990 | 287 | 523.9 | 777 | 67.3 |
|  | Hispanic or Latino | 1,346 | 253 | 509.2 | 714 | 80.2 | 1,333 | 258 | 509.9 | 719 | 70.8 |
|  | Native Hawaiian or Other Pacific Islander | 21 | 388 | 536.3 | 635 | 62.9 | 20 | 412 | 527.8 | 625 | 60.9 |
|  | Two or More Races | 797 | 317 | 501.7 | 727 | 79.6 | 803 | 350 | 504.7 | 743 | 70.1 |
|  | White | 443 | 362 | 537.2 | 707 | 73.8 | 435 | 340 | 535.3 | 714 | 69.8 |
|  | Other/Unknown | 14 | 409 | 535.7 | 656 | 70.9 | 14 | 428 | 535.1 | 659 | 73.5 |
| Other | Gifted | 7 |  |  |  |  | 7 |  |  |  |  |
|  | IEP | 587 | 253 | 514.9 | 714 | 66.8 | 560 | 258 | 510.1 | 712 | 57.7 |
|  | Migrant | 14 | 393 | 517.2 | 688 | 97.2 | 14 | 413 | 530.0 | 686 | 87.7 |
| Primary Disability | Autism | 26 | 323 | 481.6 | 610 | 70.7 | 21 | 364 | 488.5 | 645 | 65.1 |
|  | Deaf-blindness | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Developmental delay | 9 |  |  |  |  | 7 |  |  |  |  |
|  | Emotional disturbance | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Hearing Impaired | 8 |  |  |  |  | 14 | 443 | 516.4 | 590 | 46.4 |
|  | Intellectual Disability | 49 | 383 | 477.9 | 601 | 45.6 | 44 | 395 | 467.5 | 583 | 39.9 |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Multiple disabilities | 20 | 253 | 391.2 | 566 | 80.8 |  | 6 |  |  |  |  |
|  | Orthopedic impairment | 4 |  |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 92 | 393 | 525.4 | 714 | 64.1 |  | 90 | 416 | 516.7 | 712 | 58.2 |
|  | Specific learning disability | 356 | 359 | 530.2 | 666 | 54.1 |  | 352 | 401 | 519.1 | 698 | 50.9 |
|  | Speech or language impairment | 9 |  |  |  |  |  | 9 |  |  |  |  |
|  | Traumatic brain injury | 4 |  |  |  |  |  | 4 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.10: Summative Scale Score Summary by Subgroup - Grade 9 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 4,095 | 297 | 545.4 | 723 | 78.2 | 4,110 | 263 | 511.8 | 749 | 81.1 |
| Gender | Female | 1,735 | 306 | 550.2 | 710 | 76.7 | 1,743 | 278 | 516.3 | 749 | 80.8 |
|  | Male | 2,328 | 297 | 541.7 | 723 | 79.0 | 2,335 | 263 | 508.2 | 710 | 81.0 |
|  | Missing | 32 | 347 | 556.2 | 671 | 87.0 | 32 | 362 | 526.7 | 646 | 95.4 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 539 | 297 | 579.0 | 710 | 61.4 | 542 | 263 | 544.6 | 710 | 65.2 |
|  | Black or African American | 970 | 306 | 553.5 | 707 | 66.1 | 974 | 278 | 517.5 | 749 | 74.7 |
|  | Hispanic or Latino | 1,305 | 297 | 531.9 | 723 | 85.6 | 1,326 | 263 | 501.0 | 707 | 85.5 |
|  | Native Hawaiian or Other Pacific Islander | 19 | 346 | 557.0 | 644 | 74.7 | 19 | 345 | 527.0 | 620 | 73.6 |
|  | Two or More Races | 805 | 326 | 522.9 | 693 | 83.0 | 799 | 319 | 490.3 | 695 | 85.0 |
|  | White | 439 | 343 | 565.9 | 708 | 67.9 | 434 | 335 | 529.4 | 699 | 74.7 |
|  | Other/Unknown | 14 | 469 | 574.3 | 640 | 55.2 | 13 | 422 | 526.9 | 623 | 69.2 |
| Other | Gifted | 6 |  |  |  |  | 7 |  |  |  |  |
|  | IEP | 561 | 297 | 547.2 | 669 | 66.1 | 548 | 263 | 514.2 | 707 | 65.1 |
|  | Migrant | 13 | 358 | 540.6 | 679 | 89.3 | 13 | 358 | 516.8 | 655 | 104.1 |
| Primary Disability | Autism | 20 | 357 | 523.8 | 636 | 84.0 | 19 | 317 | 469.3 | 595 | 77.8 |
|  | Deaf-blindness | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Developmental delay | 9 |  |  |  |  | 6 |  |  |  |  |
|  | Emotional disturbance | 6 |  |  |  |  | 8 |  |  |  |  |
|  | Hearing Impaired | 8 |  |  |  |  | 10 | 420 | 514.6 | 571 | 57.5 |
|  | Intellectual Disability | 48 | 353 | 505.9 | 609 | 61.9 | 46 | 351 | 469.1 | 610 | 62.3 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Multiple disabilities | 8 |  |  |  |  |  | 5 |  |  |  |  |
|  | Orthopedic impairment | 4 |  |  |  |  |  | 3 |  |  |  |  |
|  | Other health impairment | 90 | 349 | 554.3 | 662 | 63.9 |  | 89 | 377 | 525.6 | 707 | 59.6 |
|  | Specific learning disability | 354 | 341 | 559.1 | 669 | 53.8 |  | 349 | 338 | 526.5 | 641 | 55.2 |
|  | Speech or language impairment | 9 |  |  |  |  |  | 9 |  |  |  |  |
|  | Traumatic brain injury | 4 |  |  |  |  |  | 4 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded.

Table S1.10: Summative Scale Score Summary by Subgroup - Grade 9 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 4,221 | 3505 | 5295.9 | 7177 | 545.2 | 4,293 | 3235 | 5302.1 | 7064 | 598.4 |
| Gender | Female | 1,785 | 3676 | 5301.7 | 7177 | 536.8 | 1,811 | 3368 | 5327.5 | 7064 | 595.1 |
|  | Male | 2,401 | 3505 | 5290.0 | 7092 | 550.3 | 2,447 | 3235 | 5282.0 | 6808 | 599.0 |
|  | Missing | 35 | 4513 | 5399.6 | 6616 | 618.9 | 35 | 4115 | 5394.0 | 6336 | 674.7 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 4 |  |  |  |  |
|  | Asian | 566 | 3505 | 5538.5 | 7031 | 518.3 | 570 | 3235 | 5565.0 | 6647 | 509.1 |
|  | Black or African American | 1,005 | 3676 | 5314.5 | 7177 | 528.0 | 1,037 | 3368 | 5342.2 | 7064 | 550.6 |
|  | Hispanic or Latino | 1,355 | 3505 | 5215.7 | 6858 | 540.2 | 1,365 | 3235 | 5206.2 | 6774 | 625.8 |
|  | Native Hawaiian or Other Pacific Islander | 21 | 4538 | 5371.9 | 6090 | 430.8 | 21 | 4055 | 5406.4 | 6164 | 520.0 |
|  | Two or More Races | 811 | 4048 | 5175.9 | 7092 | 538.5 | 835 | 3712 | 5151.1 | 6808 | 613.7 |
|  | White | 446 | 4227 | 5401.3 | 6880 | 531.8 | 447 | 4009 | 5438.5 | 6741 | 552.2 |
|  | Other/Unknown | 14 | 4508 | 5390.4 | 6432 | 542.6 | 14 | 4631 | 5451.5 | 6264 | 524.7 |
| Other | Gifted | 7 |  |  |  |  | 7 |  |  |  |  |
|  | IEP | 598 | 3505 | 5207.0 | 6702 | 460.2 | 612 | 3235 | 5257.5 | 6665 | 497.9 |
|  | Migrant | 14 | 4516 | 5323.9 | 6629 | 680.1 | 14 | 4340 | 5290.8 | 6530 | 733.4 |
| Primary Disability | Autism | 27 | 4114 | 5017.7 | 6068 | 464.8 | 27 | 3812 | 5003.7 | 6076 | 536.8 |
|  | Deaf-blindness | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Developmental delay | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Emotional disturbance | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Hearing Impaired | 15 | 4733 | 5309.5 | 5946 | 358.3 | 15 | 4674 | 5327.5 | 5915 | 411.6 |
|  | Intellectual Disability | 49 | 4415 | 4951.3 | 5845 | 289.6 | 51 | 4175 | 4948.5 | 5848 | 392.8 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Multiple disabilities | 20 | 3505 | 4375.6 | 5522 | 544.0 | 21 | 3235 | 4427.1 | 5730 | 633.2 |
|  | Orthopedic impairment | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Other health impairment | 93 | 4434 | 5270.7 | 6702 | 448.5 | 94 | 4164 | 5336.5 | 6665 | 459.0 |
|  | Specific learning disability | 358 | 4462 | 5307.0 | 6579 | 391.0 | 368 | 3989 | 5379.2 | 6462 | 400.1 |
|  | Speech or language impairment | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Traumatic brain injury | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.11: Summative Scale Score Summary by Subgroup - Grade 10

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,573 | 310 | 537.5 | 736 | 76.0 | 3,531 | 318 | 537.8 | 742 | 70.7 |
| Gender | Female | 1,551 | 310 | 540.7 | 718 | 74.1 | 1,532 | 318 | 540.1 | 734 | 69.6 |
|  | Male | 2,005 | 310 | 534.9 | 736 | 77.4 | 1,982 | 363 | 536.0 | 742 | 71.6 |
|  | Missing | 17 | 396 | 551.3 | 645 | 72.8 | 17 | 425 | 547.6 | 649 | 66.2 |
| Ethnicity | American Indian or Alaskan Native | 11 | 369 | 506.0 | 639 | 79.6 | 10 | 428 | 504.4 | 579 | 51.1 |
|  | Asian | 552 | 333 | 561.0 | 718 | 66.8 | 549 | 378 | 560.4 | 734 | 65.7 |
|  | Black or African American | 822 | 320 | 540.3 | 705 | 70.5 | 825 | 405 | 536.9 | 717 | 66.7 |
|  | Hispanic or Latino | 1,204 | 310 | 522.6 | 736 | 80.1 | 1,189 | 318 | 525.1 | 742 | 72.1 |
|  | Native Hawaiian or Other Pacific Islander | 23 | 310 | 529.2 | 664 | 86.5 | 22 | 363 | 532.9 | 669 | 73.5 |
|  | Two or More Races | 568 | 310 | 534.1 | 706 | 76.3 | 558 | 390 | 534.0 | 713 | 70.0 |
|  | White | 387 | 334 | 551.1 | 704 | 74.8 | 373 | 399 | 554.6 | 713 | 72.8 |
|  | Other/Unknown | 6 |  |  |  |  | 5 |  |  |  |  |
| Other | Gifted | 5 |  |  |  |  | 5 |  |  |  |  |
|  | IEP | 501 | 310 | 526.1 | 669 | 68.7 | 458 | 371 | 525.2 | 669 | 57.4 |
|  | Migrant | 19 | 364 | 488.0 | 582 | 60.8 | 19 | 410 | 503.2 | 584 | 52.8 |
| Primary Disability | Autism | 29 | 333 | 493.1 | 642 | 97.7 | 19 | 398 | 534.0 | 632 | 74.8 |
|  | Developmental delay | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Emotional disturbance | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Hearing Impaired | 5 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 39 | 375 | 482.4 | 612 | 50.8 | 34 | 380 | 480.8 | 595 | 48.6 |
|  | Multiple disabilities | 23 | 310 | 412.9 | 562 | 71.7 | 7 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 1 |  |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 59 | 377 | 519.0 | 626 | 59.2 |  | 59 | 371 | 507.1 | 621 | 51.5 |
|  | Specific learning disability | 307 | 381 | 545.8 | 669 | 55.6 |  | 297 | 406 | 535.7 | 669 | 54.9 |
|  | Speech or language impairment | 8 |  |  |  |  |  | 8 |  |  |  |  |
|  | Traumatic brain injury | 5 |  |  |  |  |  | 5 |  |  |  |  |
|  | Visual impairment | 5 |  |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.11: Summative Scale Score Summary by Subgroup - Grade 10 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,475 | 329 | 563.0 | 719 | 69.4 | 3,516 | 326 | 531.3 | 729 | 74.7 |
| Gender | Female | 1,502 | 329 | 566.1 | 719 | 65.9 | 1,532 | 326 | 535.5 | 723 | 73.8 |
|  | Male | 1,956 | 338 | 560.6 | 719 | 71.7 | 1,967 | 339 | 527.8 | 729 | 75.3 |
|  | Missing | 17 | 350 | 563.2 | 661 | 98.9 | 17 | 381 | 550.0 | 645 | 74.7 |
| Ethnicity | American Indian or Alaskan Native | 11 | 413 | 529.2 | 637 | 73.1 | 10 | 353 | 508.4 | 635 | 80.4 |
|  | Asian | 544 | 347 | 584.5 | 699 | 57.4 | 549 | 354 | 550.2 | 723 | 62.6 |
|  | Black or African American | 811 | 353 | 565.1 | 699 | 61.4 | 824 | 347 | 535.0 | 698 | 67.6 |
|  | Hispanic or Latino | 1,163 | 329 | 548.6 | 706 | 77.4 | 1,177 | 326 | 516.7 | 729 | 81.6 |
|  | Native Hawaiian or Other Pacific Islander | 22 | 343 | 567.0 | 682 | 75.5 | 22 | 365 | 541.8 | 642 | 72.6 |
|  | Two or More Races | 555 | 342 | 558.9 | 719 | 69.8 | 559 | 350 | 525.2 | 689 | 76.2 |
|  | White | 364 | 354 | 579.6 | 719 | 61.8 | 369 | 358 | 550.7 | 708 | 70.3 |
|  | Other/Unknown | 5 |  |  |  |  | 6 |  |  |  |  |
| Other | Gifted | 5 |  |  |  |  | 5 |  |  |  |  |
|  | IEP | 464 | 342 | 557.5 | 674 | 62.7 | 451 | 342 | 528.0 | 657 | 63.1 |
|  | Migrant | 18 | 366 | 526.1 | 631 | 68.0 | 18 | 348 | 492.3 | 606 | 74.2 |
| Primary Disability | Autism | 19 | 379 | 548.1 | 638 | 73.3 | 18 | 353 | 529.8 | 642 | 95.6 |
|  | Developmental delay | 7 |  |  |  |  | 5 |  |  |  |  |
|  | Emotional disturbance | 9 |  |  |  |  | 8 |  |  |  |  |
|  | Hearing Impaired | 5 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 39 | 349 | 490.5 | 611 | 72.6 | 33 | 361 | 476.8 | 578 | 64.0 |
|  | Multiple disabilities | 7 |  |  |  |  | 7 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 1 |  |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 57 | 342 | 540.1 | 639 | 65.3 |  | 56 | 363 | 514.1 | 640 | 59.6 |
|  | Specific learning disability | 298 | 344 | 573.9 | 674 | 50.1 |  | 295 | 342 | 540.2 | 657 | 54.9 |
|  | Speech or language impairment | 8 |  |  |  |  |  | 8 |  |  |  |  |
|  | Traumatic brain injury | 5 |  |  |  |  |  | 5 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.11: Summative Scale Score Summary by Subgroup - Grade 10 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 3,617 | 3794 | 5411.8 | 7148 | 550.0 | 3,674 | 3696 | 5439.2 | 6900 | 562.9 |
| Gender | Female | 1,568 | 3794 | 5428.4 | 7148 | 538.4 | 1,591 | 3696 | 5466.0 | 6764 | 548.0 |
|  | Male | 2,032 | 3794 | 5398.4 | 7056 | 559.1 | 2,066 | 3900 | 5417.7 | 6900 | 573.0 |
|  | Missing | 17 | 4571 | 5485.7 | 6453 | 493.3 | 17 | 4210 | 5534.1 | 6211 | 613.9 |
| Ethnicity | American Indian or Alaskan Native | 11 | 4461 | 5190.8 | 6156 | 488.0 | 11 | 4254 | 5240.3 | 6069 | 572.8 |
|  | Asian | 562 | 3956 | 5584.3 | 7148 | 514.8 | 569 | 4037 | 5611.3 | 6764 | 488.2 |
|  | Black or African American | 833 | 3868 | 5413.2 | 6809 | 520.6 | 852 | 3965 | 5454.1 | 6667 | 513.9 |
|  | Hispanic or Latino | 1,221 | 3794 | 5314.5 | 7056 | 558.9 | 1,231 | 3696 | 5328.8 | 6900 | 602.1 |
|  | Native Hawaiian or Other Pacific Islander | 23 | 3794 | 5307.7 | 6435 | 618.6 | 23 | 3900 | 5398.1 | 6357 | 656.2 |
|  | Two or More Races | 571 | 3794 | 5392.3 | 6941 | 546.2 | 586 | 3900 | 5407.7 | 6719 | 564.1 |
|  | White | 390 | 3967 | 5510.3 | 7058 | 562.8 | 395 | 4053 | 5561.0 | 6712 | 546.1 |
|  | Other/Unknown | 6 |  |  |  |  | 7 |  |  |  |  |
| Other | Gifted | 5 |  |  |  |  | 5 |  |  |  |  |
|  | IEP | 511 | 3794 | 5294.3 | 6592 | 481.9 | 525 | 3900 | 5339.6 | 6396 | 503.5 |
|  | Migrant | 19 | 4398 | 5092.2 | 5702 | 390.1 | 19 | 4126 | 5123.9 | 5870 | 469.4 |
| Primary Disability | Autism | 30 | 3956 | 5085.1 | 6097 | 665.6 | 31 | 4046 | 5092.0 | 6167 | 681.9 |
|  | Developmental delay | 5 |  |  |  |  | 7 |  |  |  |  |
|  | Emotional disturbance | 8 |  |  |  |  | 9 |  |  |  |  |
|  | Hearing Impaired | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 40 | 4311 | 5000.8 | 5963 | 327.7 | 42 | 4062 | 4938.3 | 5886 | 422.9 |
|  | Multiple disabilities | 23 | 3794 | 4556.8 | 5771 | 530.4 | 23 | 3900 | 4530.0 | 5586 | 466.7 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 1 |  |  |  |  |  | 2 |  |  |  |  |
|  | Other health impairment | 61 | 4300 | 5225.7 | 5975 | 388.8 |  | 62 | 3992 | 5273.9 | 6074 | 430.1 |
|  | Specific learning disability | 312 | 4475 | 5429.3 | 6592 | 413.9 |  | 318 | 4022 | 5498.8 | 6396 | 400.2 |
|  | Speech or language impairment | 8 |  |  |  |  |  | 8 |  |  |  |  |
|  | Traumatic brain injury | 5 |  |  |  |  |  | 5 |  |  |  |  |
|  | Visual impairment | 5 |  |  |  |  |  | 5 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.12: Summative Scale Score Summary by Subgroup - Grade 11

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 2,927 | 289 | 549.8 | 741 | 71.2 | 2,896 | 325 | 547.4 | 755 | 68.9 |
| Gender | Female | 1,326 | 310 | 550.3 | 741 | 71.4 | 1,308 | 348 | 548.4 | 755 | 67.2 |
|  | Male | 1,576 | 289 | 549.6 | 734 | 71.2 | 1,565 | 325 | 546.7 | 736 | 70.4 |
|  | Missing | 25 | 427 | 539.0 | 666 | 60.8 | 23 | 432 | 541.3 | 684 | 66.7 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 533 | 352 | 565.1 | 734 | 66.6 | 533 | 403 | 561.0 | 736 | 67.6 |
|  | Black or African American | 763 | 301 | 544.5 | 716 | 68.5 | 760 | 325 | 540.4 | 726 | 65.5 |
|  | Hispanic or Latino | 900 | 289 | 538.7 | 708 | 74.5 | 883 | 348 | 537.8 | 727 | 69.3 |
|  | Native Hawaiian or Other Pacific Islander | 15 | 433 | 545.0 | 632 | 58.9 | 15 | 454 | 530.3 | 612 | 50.2 |
|  | Two or More Races | 341 | 390 | 556.8 | 741 | 70.5 | 342 | 394 | 553.3 | 755 | 67.6 |
|  | White | 365 | 377 | 559.7 | 709 | 70.3 | 355 | 375 | 560.7 | 724 | 73.2 |
|  | Other/Unknown | 7 |  |  |  |  | 5 |  |  |  |  |
| Other | Gifted | 3 |  |  |  |  | 3 |  |  |  |  |
|  | IEP | 424 | 301 | 525.2 | 681 | 68.0 | 403 | 325 | 521.6 | 683 | 60.4 |
|  | Migrant | 33 | 390 | 497.5 | 670 | 74.0 | 32 | 401 | 506.1 | 686 | 72.2 |
| Primary Disability | Autism | 13 | 379 | 489.1 | 591 | 65.2 | 9 |  |  |  |  |
|  | Developmental delay | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Emotional disturbance | 14 | 453 | 514.3 | 578 | 34.3 | 14 | 450 | 503.5 | 591 | 36.6 |
|  | Hearing Impaired | 3 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 41 | 352 | 480.7 | 586 | 56.7 | 35 | 409 | 484.0 | 566 | 41.1 |
|  | Multiple disabilities | 19 | 289 | 406.2 | 514 | 57.1 | 9 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 1 |  |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 51 | 384 | 535.4 | 647 | 58.5 |  | 50 | 407 | 533.4 | 660 | 60.4 |
|  | Specific learning disability | 266 | 366 | 542.8 | 681 | 59.5 |  | 263 | 397 | 531.8 | 683 | 57.6 |
|  | Speech or language impairment | 3 |  |  |  |  |  | 3 |  |  |  |  |
|  | Traumatic brain injury | 3 |  |  |  |  |  | 3 |  |  |  |  |
|  | Visual impairment | 4 |  |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.12: Summative Scale Score Summary by Subgroup - Grade 11 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 2,832 | 324 | 574.7 | 735 | 64.3 | 2,880 | 292 | 543.1 | 712 | 69.7 |
| Gender | Female | 1,276 | 336 | 576.5 | 735 | 63.1 | 1,302 | 329 | 544.7 | 709 | 69.5 |
|  | Male | 1,535 | 324 | 573.4 | 732 | 65.3 | 1,556 | 292 | 541.7 | 712 | 70.0 |
|  | Missing | 21 | 379 | 565.6 | 652 | 60.2 | 22 | 394 | 550.8 | 641 | 50.2 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 528 | 390 | 589.1 | 732 | 54.7 | 534 | 347 | 555.7 | 712 | 62.2 |
|  | Black or African American | 750 | 324 | 570.3 | 708 | 61.4 | 751 | 313 | 539.1 | 702 | 67.2 |
|  | Hispanic or Latino | 849 | 336 | 562.3 | 718 | 73.3 | 881 | 292 | 532.2 | 709 | 75.3 |
|  | Native Hawaiian or Other Pacific Islander | 16 | 486 | 579.6 | 649 | 44.9 | 15 | 430 | 536.3 | 616 | 58.2 |
|  | Two or More Races | 335 | 372 | 577.8 | 735 | 61.1 | 340 | 358 | 549.4 | 709 | 70.0 |
|  | White | 346 | 353 | 590.2 | 706 | 56.6 | 351 | 362 | 554.1 | 707 | 66.2 |
|  | Other/Unknown | 5 |  |  |  |  | 5 |  |  |  |  |
| Other | Gifted | 3 |  |  |  |  | 3 |  |  |  |  |
|  | IEP | 405 | 324 | 557.6 | 706 | 66.9 | 398 | 313 | 525.1 | 681 | 69.7 |
|  | Migrant | 32 | 372 | 534.0 | 699 | 83.5 | 33 | 359 | 490.1 | 677 | 86.7 |
| Primary Disability | Autism | 11 | 437 | 532.1 | 616 | 59.8 | 8 |  |  |  |  |
|  | Developmental delay | 5 |  |  |  |  | 6 |  |  |  |  |
|  | Emotional disturbance | 12 | 365 | 537.6 | 597 | 63.9 | 13 | 385 | 491.3 | 580 | 47.5 |
|  | Hearing Impaired | 2 |  |  |  |  | 5 |  |  |  |  |
|  | Intellectual Disability | 40 | 353 | 501.1 | 633 | 65.0 | 35 | 347 | 476.1 | 600 | 70.1 |
|  | Multiple disabilities | 10 | 327 | 434.7 | 514 | 67.9 | 10 | 292 | 385.1 | 497 | 63.4 |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 1 |  |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 48 | 440 | 565.9 | 622 | 40.8 |  | 50 | 378 | 533.8 | 639 | 62.3 |
|  | Specific learning disability | 266 | 344 | 573.9 | 706 | 58.1 |  | 262 | 343 | 539.1 | 681 | 62.5 |
|  | Speech or language impairment | 3 |  |  |  |  |  | 3 |  |  |  |  |
|  | Traumatic brain injury | 3 |  |  |  |  |  | 3 |  |  |  |  |
|  | Visual impairment | 3 |  |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.12: Summative Scale Score Summary by Subgroup - Grade 11 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 2,957 | 3794 | 5490.6 | 7177 | 530.8 | 2,997 | 3568 | 5529.8 | 6981 | 529.4 |
| Gender | Female | 1,336 | 3794 | 5491.5 | 7177 | 523.9 | 1,353 | 3884 | 5540.9 | 6981 | 525.8 |
|  | Male | 1,596 | 3868 | 5491.1 | 7044 | 537.4 | 1,619 | 3568 | 5521.4 | 6937 | 533.7 |
|  | Missing | 25 | 4657 | 5418.5 | 6559 | 491.2 | 25 | 4574 | 5475.5 | 6373 | 438.0 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 541 | 4339 | 5600.8 | 7177 | 523.1 | 545 | 4145 | 5644.4 | 6937 | 478.8 |
|  | Black or African American | 773 | 3794 | 5436.8 | 6805 | 502.1 | 792 | 3674 | 5483.6 | 6766 | 511.7 |
|  | Hispanic or Latino | 905 | 3794 | 5418.7 | 6830 | 536.2 | 912 | 3568 | 5446.3 | 6755 | 566.4 |
|  | Native Hawaiian or Other Pacific Islander | 15 | 4714 | 5392.7 | 5957 | 398.3 | 16 | 4732 | 5508.7 | 5994 | 402.2 |
|  | Two or More Races | 346 | 4376 | 5541.8 | 7092 | 524.4 | 353 | 4137 | 5581.9 | 6981 | 516.2 |
|  | White | 367 | 4281 | 5574.6 | 7044 | 558.5 | 369 | 4215 | 5618.0 | 6711 | 516.1 |
|  | Other/Unknown | 7 |  |  |  |  | 7 |  |  |  |  |
| Other | Gifted | 3 |  |  |  |  | 3 |  |  |  |  |
|  | IEP | 433 | 3794 | 5281.1 | 6660 | 474.7 | 446 | 3674 | 5335.5 | 6531 | 523.2 |
|  | Migrant | 33 | 4399 | 5158.1 | 6465 | 515.3 | 33 | 4137 | 5154.6 | 6382 | 598.8 |
| Primary Disability | Autism | 13 | 4271 | 5043.8 | 5740 | 444.7 | 14 | 4472 | 5095.2 | 5905 | 483.7 |
|  | Developmental delay | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Emotional disturbance | 14 | 4767 | 5230.5 | 5789 | 277.2 | 14 | 4479 | 5180.1 | 5739 | 308.9 |
|  | Hearing Impaired | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Intellectual Disability | 41 | 4339 | 4990.8 | 5696 | 338.0 | 45 | 4145 | 4968.4 | 5806 | 412.3 |
|  | Multiple disabilities | 20 | 3794 | 4515.1 | 5287 | 364.6 | 22 | 3568 | 4474.8 | 5191 | 420.9 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment | 1 |  |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 52 | 4322 | 5384.4 | 6297 | 458.3 |  | 52 | 4378 | 5424.1 | 6172 | 436.1 |
|  | Specific learning disability | 268 | 4376 | 5397.5 | 6660 | 424.5 |  | 274 | 4047 | 5493.4 | 6531 | 452.6 |
|  | Speech or language impairment | 3 |  |  |  |  |  | 3 |  |  |  |  |
|  | Traumatic brain injury | 3 |  |  |  |  |  | 3 |  |  |  |  |
|  | Visual impairment | 4 |  |  |  |  |  | 4 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.13: Summative Scale Score Summary by Subgroup - Grade 12

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 2,203 | 253 | 554.4 | 809 | 71.4 | 2,171 | 258 | 551.9 | 817 | 70.1 |
| Gender | Female | 1,040 | 310 | 555.6 | 809 | 70.6 | 1,017 | 381 | 551.6 | 817 | 68.5 |
|  | Male | 1,150 | 253 | 552.9 | 712 | 71.9 | 1,141 | 258 | 551.7 | 729 | 71.4 |
|  | Missing | 13 | 431 | 592.1 | 692 | 85.6 | 13 | 453 | 598.0 | 714 | 73.4 |
| Ethnicity | American Indian or Alaskan Native | 5 |  |  |  |  | 4 |  |  |  |  |
|  | Asian | 466 | 310 | 574.8 | 809 | 67.4 | 453 | 408 | 575.1 | 817 | 67.9 |
|  | Black or African American | 510 | 253 | 548.1 | 720 | 68.4 | 510 | 258 | 542.6 | 732 | 67.8 |
|  | Hispanic or Latino | 724 | 281 | 542.9 | 710 | 75.5 | 711 | 285 | 542.4 | 729 | 70.7 |
|  | Native Hawaiian or Other Pacific Islander | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Two or More Races | 212 | 401 | 555.7 | 706 | 66.3 | 214 | 402 | 551.6 | 729 | 65.4 |
|  | White | 274 | 381 | 560.5 | 733 | 69.4 | 267 | 407 | 555.5 | 749 | 72.2 |
|  | Other/Unknown | 3 |  |  |  |  | 3 |  |  |  |  |
| Other | Gifted | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 301 | 281 | 525.3 | 683 | 67.0 | 282 | 285 | 519.9 | 690 | 60.8 |
|  | Migrant | 20 | 406 | 507.1 | 710 | 81.5 | 20 | 424 | 511.5 | 729 | 74.9 |
| Primary Disability | Autism | 11 | 389 | 509.4 | 620 | 82.7 | 10 | 425 | 518.5 | 611 | 62.7 |
|  | Developmental delay | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Emotional disturbance | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Hearing Impaired | 1 |  |  |  |  | 2 |  |  |  |  |
|  | Intellectual Disability | 40 | 310 | 472.2 | 570 | 52.9 | 34 | 417 | 475.2 | 556 | 35.9 |
|  | Multiple disabilities | 15 | 310 | 427.3 | 497 | 42.1 | 8 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Other health impairment | 28 | 409 | 528.5 | 625 | 54.7 | 27 | 403 | 511.7 | 611 | 53.8 |
|  | Specific learning disability | 193 | 384 | 544.3 | 683 | 56.9 | 187 | 407 | 533.0 | 690 | 57.3 |
|  | Traumatic brain injury | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.13: Summative Scale Score Summary by Subgroup - Grade 12 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 2,147 | 297 | 580.6 | 770 | 61.3 | 2,163 | 263 | 546.8 | 808 | 67.3 |
| Gender | Female | 1,012 | 346 | 582.5 | 770 | 59.9 | 1,016 | 344 | 548.7 | 808 | 67.0 |
|  | Male | 1,123 | 297 | 578.5 | 715 | 62.3 | 1,137 | 263 | 544.8 | 704 | 67.3 |
|  | Missing | 12 | 463 | 613.7 | 710 | 73.4 | 10 | 383 | 584.8 | 685 | 89.7 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 5 |  |  |  |  |
|  | Asian | 447 | 400 | 596.9 | 770 | 52.4 | 452 | 354 | 564.8 | 808 | 59.1 |
|  | Black or African American | 507 | 297 | 576.3 | 697 | 58.5 | 509 | 263 | 541.5 | 698 | 64.8 |
|  | Hispanic or Latino | 710 | 316 | 568.3 | 715 | 67.0 | 710 | 295 | 536.4 | 699 | 73.1 |
|  | Native Hawaiian or Other Pacific Islander | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Two or More Races | 202 | 360 | 582.6 | 705 | 58.2 | 209 | 373 | 549.8 | 691 | 63.5 |
|  | White | 265 | 355 | 592.7 | 720 | 59.4 | 267 | 354 | 551.6 | 721 | 66.3 |
|  | Other/Unknown | 3 |  |  |  |  | 2 |  |  |  |  |
| Other | Gifted | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 278 | 351 | 564.3 | 674 | 58.3 | 280 | 353 | 524.4 | 656 | 68.4 |
|  | Migrant | 18 | 364 | 536.0 | 688 | 67.7 | 20 | 390 | 501.6 | 665 | 65.2 |
| Primary Disability | Autism | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Developmental delay | 1 |  |  |  |  | 2 |  |  |  |  |
|  | Emotional disturbance | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Hearing Impaired | 1 |  |  |  |  | 2 |  |  |  |  |
|  | Intellectual Disability | 34 | 385 | 507.6 | 628 | 55.6 | 33 | 364 | 465.2 | 589 | 60.6 |
|  | Multiple disabilities | 5 |  |  |  |  | 7 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Other health impairment | 28 | 438 | 557.1 | 644 | 49.8 | 25 | 368 | 516.4 | 626 | 63.0 |
|  | Specific learning disability | 190 | 360 | 579.4 | 674 | 47.9 | 191 | 354 | 539.2 | 656 | 59.0 |
|  | Traumatic brain injury | 3 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption or Not Attempted are excluded

Table S1.13: Summative Scale Score Summary by Subgroup - Grade 12 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 2,223 | 3505 | 5528.6 | 7177 | 544.6 | 2,247 | 3235 | 5570.0 | 7483 | 521.2 |
| Gender | Female | 1,045 | 3794 | 5524.3 | 7177 | 531.1 | 1,057 | 3900 | 5578.0 | 7483 | 516.4 |
|  | Male | 1,164 | 3505 | 5529.0 | 7075 | 554.6 | 1,176 | 3235 | 5559.5 | 6754 | 524.1 |
|  | Missing | 14 | 4640 | 5821.4 | 7058 | 663.9 | 14 | 4555 | 5841.9 | 6561 | 593.0 |
| Ethnicity | American Indian or Alaskan Native | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Asian | 468 | 3794 | 5692.2 | 7177 | 543.8 | 473 | 3900 | 5716.1 | 7483 | 487.4 |
|  | Black or African American | 516 | 3505 | 5468.2 | 7032 | 522.8 | 526 | 3235 | 5528.6 | 6766 | 497.1 |
|  | Hispanic or Latino | 731 | 3505 | 5452.6 | 7075 | 553.2 | 735 | 3517 | 5479.4 | 6697 | 551.7 |
|  | Native Hawaiian or Other Pacific Islander | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Two or More Races | 215 | 4412 | 5531.0 | 6853 | 506.6 | 216 | 4347 | 5579.6 | 6754 | 486.6 |
|  | White | 276 | 4367 | 5559.7 | 6960 | 538.6 | 280 | 4190 | 5628.4 | 6912 | 512.7 |
|  | Other/Unknown | 3 |  |  |  |  | 3 |  |  |  |  |
| Other | Gifted | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 305 | 3505 | 5282.4 | 6750 | 476.7 | 309 | 3517 | 5342.1 | 6415 | 507.7 |
|  | Migrant | 20 | 4590 | 5223.1 | 7075 | 641.5 | 20 | 4486 | 5231.3 | 6697 | 556.9 |
| Primary Disability | Autism | 11 | 4580 | 5197.8 | 5837 | 491.7 | 11 | 4120 | 5245.1 | 5976 | 627.4 |
|  | Developmental delay | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Emotional disturbance | 9 |  |  |  |  | 9 |  |  |  |  |
|  | Hearing Impaired | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Intellectual Disability | 40 | 3794 | 4932.0 | 5621 | 337.9 | 41 | 3900 | 4920.3 | 5698 | 386.6 |
|  | Multiple disabilities | 16 | 3794 | 4622.8 | 5036 | 275.2 | 16 | 3900 | 4555.5 | 5030 | 287.4 |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Other health impairment | 29 | 4520 | 5287.5 | 5989 | 383.8 | 29 | 4320 | 5340.6 | 6023 | 418.6 |
|  | Specific learning disability | 194 | 4397 | 5409.5 | 6750 | 431.6 | 197 | 4190 | 5495.8 | 6415 | 419.1 |
|  | Traumatic brain injury | 2 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.


## Section 2: Summative Assessment - Percentage of Students by Domain Performance Level

[^5]Table S2.1: Summative Performance Level by Domain - Kindergarten

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 10,052 | 11.8 | 13.1 | 48.3 | 11.5 | 15.2 | 9,925 | 13.3 | 14.0 | 36.7 | 14.8 | 21.2 |
| Gender | Female | 4,792 | 10.3 | 10.7 | 48.9 | 12.3 | 17.8 | 4,749 | 11.3 | 12.5 | 36.0 | 15.2 | 25.0 |
|  | Male | 5,070 | 13.2 | 15.5 | 47.9 | 10.7 | 12.7 | 4,991 | 15.1 | 15.5 | 37.5 | 14.1 | 17.7 |
|  | Missing | 190 | 13.7 | 10.5 | 45.3 | 12.1 | 18.4 | 185 | 14.1 | 12.4 | 29.2 | 22.2 | 22.2 |
| Ethnicity | American Indian or Alaskan Native | 18 | 11.1 | 11.1 | 44.4 | 27.8 | 5.6 | 18 | 5.6 | 22.2 | 33.3 | 22.2 | 16.7 |
|  | Asian | 2,510 | 7.3 | 10.2 | 48.0 | 13.7 | 20.7 | 2,498 | 8.5 | 10.4 | 36.1 | 16.4 | 28.6 |
|  | Black or African American | 1,887 | 11.2 | 13.2 | 51.0 | 11.0 | 13.6 | 1,868 | 13.7 | 15.1 | 38.5 | 14.3 | 18.3 |
|  | Hispanic or Latino | 2,686 | 14.6 | 16.9 | 49.1 | 9.5 | 9.9 | 2,642 | 15.9 | 18.1 | 37.7 | 13.8 | 14.5 |
|  | Native Hawaiian or Other Pacific Islander | 48 | 12.5 | 14.6 | 50.0 | 10.4 | 12.5 | 48 | 10.4 | 10.4 | 41.7 | 18.8 | 18.8 |
|  | Two or More Races | 1,261 | 20.0 | 15.5 | 43.9 | 8.2 | 12.4 | 1,233 | 21.1 | 16.3 | 34.5 | 11.1 | 17.0 |
|  | White | 1,612 | 8.6 | 9.4 | 48.0 | 14.4 | 19.6 | 1,588 | 10.1 | 9.8 | 35.4 | 17.3 | 27.5 |
|  | Other/Unknown | 30 | 13.3 | 3.3 | 40.0 | 6.7 | 36.7 | 30 | 13.3 | 10.0 | 23.3 | 10.0 | 43.3 |
| Other | Gifted | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | IEP | 508 | 25.6 | 19.7 | 44.9 | 5.1 | 4.7 | 462 | 20.3 | 21.2 | 39.8 | 10.2 | 8.4 |
|  | Migrant | 16 | 6.3 | 25.0 | 43.8 | 6.3 | 18.8 | 18 | 11.1 | 22.2 | 38.9 | 5.6 | 22.2 |
| Primary Disability | Autism | 123 | 40.7 | 22.8 | 31.7 | 4.9 | 0.0 | 93 | 23.7 | 24.7 | 39.8 | 8.6 | 3.2 |
|  | Developmental delay | 9 | 55.6 | 11.1 | 33.3 | 0.0 | 0.0 | 7 | 42.9 | 28.6 | 28.6 | 0.0 | 0.0 |
|  | Emotional disturbance | 6 | 0.0 | 0.0 | 50.0 | 33.3 | 16.7 | 6 | 0.0 | 0.0 | 16.7 | 50.0 | 33.3 |
|  | Hearing Impaired | 3 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 | 4 | 0.0 | 75.0 | 25.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 25 | 56.0 | 36.0 | 8.0 | 0.0 | 0.0 | 20 | 55.0 | 25.0 | 20.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 20 | 80.0 | 15.0 | 5.0 | 0.0 | 0.0 | 10 | 80.0 | 10.0 | 10.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 10 | 10.0 | 30.0 | 50.0 | 0.0 | 10.0 | 10 | 10.0 | 30.0 | 40.0 | 10.0 | 10.0 |
|  | Other health impairment | 41 | 24.4 | 12.2 | 48.8 | 7.3 | 7.3 | 40 | 25.0 | 12.5 | 35.0 | 12.5 | 15.0 |
|  | Specific learning disability | 35 | 14.3 | 25.7 | 54.3 | 5.7 | 0.0 | 34 | 23.5 | 17.6 | 50.0 | 5.9 | 2.9 |
|  | Speech or language impairment | 223 | 9.9 | 17.5 | 58.3 | 5.8 | 8.5 | 225 | 11.6 | 20.9 | 43.6 | 12.4 | 11.6 |
|  | Traumatic brain injury | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Visual impairment | 5 | 20.0 | 0.0 | 80.0 | 0.0 | 0.0 | 4 | 0.0 | 25.0 | 75.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.1: Summative Performance Level by Domain - Kindergarten (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 9,758 | 11.8 | 9.7 | 26.2 | 16.0 | 36.3 | 9,899 | 34.2 | 25.8 | 27.9 | 4.9 | 7.2 |
| Gender | Female | 4,678 | 10.2 | 9.0 | 24.0 | 16.2 | 40.5 | 4,739 | 32.2 | 26.7 | 28.9 | 4.5 | 7.7 |
|  | Male | 4,897 | 13.3 | 10.3 | 28.4 | 15.9 | 32.1 | 4,977 | 36.2 | 25.1 | 27.0 | 5.1 | 6.6 |
|  | Missing | 183 | 13.1 | 12.0 | 21.3 | 14.8 | 38.8 | 183 | 29.0 | 24.0 | 26.8 | 11.5 | 8.7 |
| Ethnicity | American Indian or Alaskan Native | 17 | 0.0 | 11.8 | 29.4 | 23.5 | 35.3 | 19 | 31.6 | 26.3 | 31.6 | 5.3 | 5.3 |
|  | Asian | 2,460 | 8.1 | 8.5 | 23.6 | 16.5 | 43.3 | 2,483 | 19.9 | 23.6 | 36.4 | 8.3 | 11.8 |
|  | Black or African American | 1,834 | 7.8 | 8.1 | 28.0 | 18.6 | 37.5 | 1,858 | 34.3 | 26.7 | 28.4 | 4.5 | 6.0 |
|  | Hispanic or Latino | 2,596 | 15.5 | 12.2 | 28.2 | 14.3 | 29.8 | 2,623 | 46.5 | 28.3 | 19.9 | 2.0 | 3.3 |
|  | Native Hawaiian or Other Pacific Islander | 47 | 4.3 | 19.1 | 25.5 | 23.4 | 27.7 | 48 | 29.2 | 25.0 | 29.2 | 10.4 | 6.3 |
|  | Two or More Races | 1,221 | 21.9 | 11.0 | 26.4 | 13.3 | 27.4 | 1,250 | 48.0 | 24.8 | 19.1 | 3.4 | 4.6 |
|  | White | 1,560 | 8.8 | 8.1 | 24.9 | 16.9 | 41.3 | 1,588 | 25.5 | 25.1 | 34.2 | 5.7 | 9.4 |
|  | Other/Unknown | 23 | 4.3 | 0.0 | 13.0 | 17.4 | 65.2 | 30 | 23.3 | 20.0 | 33.3 | 6.7 | 16.7 |
| Other | Gifted | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | IEP | 452 | 27.9 | 18.4 | 30.1 | 11.9 | 11.7 | 454 | 48.5 | 21.8 | 22.9 | 4.0 | 2.9 |
|  | Migrant | 17 | 23.5 | 17.6 | 17.6 | 17.6 | 23.5 | 17 | 35.3 | 29.4 | 23.5 | 5.9 | 5.9 |
| Primary Disability | Autism | 91 | 40.7 | 14.3 | 30.8 | 12.1 | 2.2 | 89 | 37.1 | 20.2 | 30.3 | 11.2 | 1.1 |
|  | Developmental delay | 7 | 14.3 | 42.9 | 14.3 | 14.3 | 14.3 | 8 | 37.5 | 37.5 | 25.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 7 | 14.3 | 0.0 | 28.6 | 0.0 | 57.1 | 6 | 16.7 | 0.0 | 50.0 | 16.7 | 16.7 |
|  | Hearing Impaired | 3 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 20 | 70.0 | 10.0 | 20.0 | 0.0 | 0.0 | 20 | 80.0 | 10.0 | 10.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 14 | 78.6 | 7.1 | 14.3 | 0.0 | 0.0 | 11 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 10 | 30.0 | 10.0 | 30.0 | 20.0 | 10.0 | 10 | 40.0 | 30.0 | 30.0 | 0.0 | 0.0 |
|  | Other health impairment | 35 | 22.9 | 11.4 | 34.3 | 14.3 | 17.1 | 39 | 64.1 | 5.1 | 20.5 | 0.0 | 10.3 |
|  | Specific learning disability | 33 | 21.2 | 27.3 | 27.3 | 18.2 | 6.1 | 34 | 47.1 | 35.3 | 14.7 | 2.9 | 0.0 |
|  | Speech or language impairment | 219 | 15.5 | 21.9 | 32.9 | 12.8 | 16.9 | 222 | 45.5 | 25.2 | 23.4 | 2.7 | 3.2 |
|  | Traumatic brain injury | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Visual impairment | 5 | 20.0 | 20.0 | 40.0 | 20.0 | 0.0 | 4 | 25.0 | 50.0 | 25.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.2: Summative Performance Level by Domain - Grade 1

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 8,723 | 5.8 | 6.2 | 28.1 | 25.4 | 34.5 | 8,628 | 18.4 | 16.8 | 30.1 | 14.1 | 20.5 |
| Gender | Female | 4,128 | 5.2 | 5.5 | 26.3 | 25.7 | 37.3 | 4,104 | 16.8 | 16.4 | 29.3 | 14.9 | 22.6 |
|  | Male | 4,475 | 6.3 | 6.9 | 29.7 | 25.1 | 32.0 | 4,406 | 20.0 | 17.2 | 30.7 | 13.5 | 18.6 |
|  | Missing | 120 | 6.7 | 7.5 | 25.8 | 24.2 | 35.8 | 118 | 17.8 | 16.1 | 35.6 | 9.3 | 21.2 |
| Ethnicity | American Indian or Alaskan Native | 28 | 0.0 | 14.3 | 35.7 | 21.4 | 28.6 | 28 | 28.6 | 14.3 | 21.4 | 14.3 | 21.4 |
|  | Asian | 2,019 | 3.4 | 5.0 | 24.0 | 23.5 | 44.2 | 2,001 | 9.5 | 12.6 | 27.6 | 17.7 | 32.6 |
|  | Black or African American | 1,597 | 5.8 | 7.0 | 30.6 | 25.2 | 31.5 | 1,572 | 16.9 | 15.6 | 32.6 | 15.7 | 19.2 |
|  | Hispanic or Latino | 2,520 | 5.9 | 7.9 | 31.6 | 28.1 | 26.5 | 2,493 | 25.4 | 21.9 | 31.1 | 10.0 | 11.6 |
|  | Native Hawaiian or Other Pacific Islander | 55 | 9.1 | 7.3 | 18.2 | 20.0 | 45.5 | 55 | 12.7 | 16.4 | 25.5 | 18.2 | 27.3 |
|  | Two or More Races | 1,078 | 10.9 | 6.3 | 31.5 | 24.1 | 27.1 | 1,074 | 28.9 | 18.8 | 27.9 | 11.7 | 12.7 |
|  | White | 1,397 | 5.1 | 3.9 | 22.2 | 24.9 | 43.9 | 1,378 | 12.6 | 13.8 | 30.9 | 16.3 | 26.5 |
|  | Other/Unknown | 29 | 3.4 | 3.4 | 34.5 | 20.7 | 37.9 | 27 | 11.1 | 11.1 | 40.7 | 14.8 | 22.2 |
| Other | Gifted | 23 | 0.0 | 0.0 | 13.0 | 17.4 | 69.6 | 23 | 4.3 | 4.3 | 21.7 | 17.4 | 52.2 |
|  | IEP | 600 | 17.7 | 11.5 | 39.3 | 19.3 | 12.2 | 530 | 37.0 | 21.3 | 24.0 | 11.5 | 6.2 |
|  | Migrant | 22 | 13.6 | 18.2 | 4.5 | 31.8 | 31.8 | 22 | 27.3 | 27.3 | 22.7 | 4.5 | 18.2 |
| Primary Disability | Autism | 116 | 37.9 | 18.1 | 29.3 | 6.9 | 7.8 | 84 | 36.9 | 20.2 | 17.9 | 16.7 | 8.3 |
|  | Developmental delay | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 14 | 14.3 | 14.3 | 35.7 | 21.4 | 14.3 | 13 | 38.5 | 23.1 | 30.8 | 7.7 | 0.0 |
|  | Hearing Impaired | 8 | 37.5 | 12.5 | 37.5 | 12.5 | 0.0 | 8 | 50.0 | 12.5 | 25.0 | 12.5 | 0.0 |
|  | Intellectual Disability | 33 | 33.3 | 15.2 | 42.4 | 3.0 | 6.1 | 26 | 76.9 | 11.5 | 11.5 | 0.0 | 0.0 |
|  | Multiple disabilities | 26 | 73.1 | 7.7 | 11.5 | 7.7 | 0.0 | 10 | 60.0 | 10.0 | 10.0 | 10.0 | 10.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 13 | 15.4 | 7.7 | 38.5 | 23.1 | 15.4 | 11 | 36.4 | 9.1 | 27.3 | 18.2 | 9.1 |
|  | Other health impairment | 68 | 14.7 | 10.3 | 39.7 | 16.2 | 19.1 | 60 | 38.3 | 20.0 | 26.7 | 10.0 | 5.0 |
|  | Specific learning disability | 85 | 7.1 | 12.9 | 48.2 | 25.9 | 5.9 | 84 | 53.6 | 19.0 | 21.4 | 2.4 | 3.6 |
|  | Speech or language impairment | 227 | 3.1 | 7.5 | 44.1 | 28.2 | 17.2 | 227 | 25.1 | 25.6 | 27.3 | 15.0 | 7.0 |
|  | Traumatic brain injury | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Visual impairment | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.2: Summative Performance Level by Domain - Grade 1 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 8,534 | 16.4 | 22.2 | 10.2 | 18.3 | 32.9 | 8,584 | 23.4 | 20.5 | 32.3 | 9.6 | 14.2 |
| Gender | Female | 4,070 | 14.6 | 20.5 | 10.1 | 18.5 | 36.3 | 4,085 | 21.4 | 19.8 | 32.3 | 10.6 | 15.9 |
|  | Male | 4,348 | 18.0 | 23.7 | 10.3 | 18.1 | 29.9 | 4,383 | 25.4 | 21.2 | 32.3 | 8.6 | 12.5 |
|  | Missing | 116 | 19.0 | 25.9 | 10.3 | 19.0 | 25.9 | 116 | 19.8 | 22.4 | 35.3 | 8.6 | 13.8 |
| Ethnicity | American Indian or Alaskan Native | 27 | 3.7 | 22.2 | 14.8 | 18.5 | 40.7 | 28 | 32.1 | 7.1 | 35.7 | 7.1 | 17.9 |
|  | Asian | 1,977 | 12.4 | 16.7 | 8.5 | 18.0 | 44.4 | 1,987 | 12.9 | 16.6 | 34.3 | 12.6 | 23.5 |
|  | Black or African American | 1,565 | 14.6 | 24.5 | 11.7 | 17.7 | 31.5 | 1,575 | 21.1 | 21.1 | 34.7 | 10.9 | 12.2 |
|  | Hispanic or Latino | 2,448 | 19.9 | 26.1 | 11.1 | 19.6 | 23.4 | 2,469 | 32.6 | 24.2 | 29.7 | 6.0 | 7.5 |
|  | Native Hawaiian or Other Pacific Islander | 55 | 14.5 | 20.0 | 12.7 | 21.8 | 30.9 | 55 | 21.8 | 16.4 | 25.5 | 20.0 | 16.4 |
|  | Two or More Races | 1,067 | 23.5 | 24.5 | 9.9 | 16.9 | 25.2 | 1,070 | 34.9 | 22.1 | 27.6 | 6.8 | 8.6 |
|  | White | 1,370 | 12.7 | 19.2 | 9.2 | 18.2 | 40.7 | 1,372 | 15.7 | 18.3 | 35.2 | 11.7 | 19.0 |
|  | Other/Unknown | 25 | 16.0 | 12.0 | 8.0 | 24.0 | 40.0 | 28 | 17.9 | 14.3 | 39.3 | 7.1 | 21.4 |
| Other | Gifted | 23 | 0.0 | 13.0 | 4.3 | 13.0 | 69.6 | 22 | 4.5 | 9.1 | 22.7 | 18.2 | 45.5 |
|  | IEP | 530 | 39.1 | 27.0 | 8.9 | 12.1 | 13.0 | 529 | 47.4 | 18.3 | 24.2 | 6.8 | 3.2 |
|  | Migrant | 22 | 22.7 | 13.6 | 18.2 | 18.2 | 27.3 | 22 | 36.4 | 18.2 | 27.3 | 9.1 | 9.1 |
| Primary Disability | Autism | 83 | 60.2 | 18.1 | 7.2 | 3.6 | 10.8 | 82 | 45.1 | 14.6 | 26.8 | 9.8 | 3.7 |
|  | Developmental delay | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 14 | 57.1 | 21.4 | 0.0 | 7.1 | 14.3 | 13 | 53.8 | 7.7 | 30.8 | 7.7 | 0.0 |
|  | Hearing Impaired | 8 | 62.5 | 12.5 | 12.5 | 12.5 | 0.0 | 8 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 27 | 70.4 | 7.4 | 14.8 | 7.4 | 0.0 | 27 | 81.5 | 3.7 | 11.1 | 3.7 | 0.0 |
|  | Multiple disabilities | 9 | 66.7 | 22.2 | 11.1 | 0.0 | 0.0 | 9 | 66.7 | 11.1 | 22.2 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 11 | 18.2 | 27.3 | 9.1 | 18.2 | 27.3 | 11 | 45.5 | 18.2 | 9.1 | 18.2 | 9.1 |
|  | Other health impairment | 62 | 32.3 | 35.5 | 4.8 | 17.7 | 9.7 | 61 | 54.1 | 13.1 | 23.0 | 8.2 | 1.6 |
|  | Specific learning disability | 83 | 41.0 | 26.5 | 10.8 | 13.3 | 8.4 | 84 | 61.9 | 17.9 | 16.7 | 2.4 | 1.2 |
|  | Speech or language impairment | 224 | 26.3 | 32.1 | 9.4 | 13.8 | 18.3 | 227 | 36.1 | 22.5 | 29.5 | 7.5 | 4.4 |
|  | Traumatic brain injury | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Visual impairment | 2 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.3: Summative Performance Level by Domain - Grade 2

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 7,247 | 6.2 | 4.3 | 25.8 | 34.5 | 29.3 | 7,128 | 17.6 | 14.6 | 31.7 | 20.0 | 16.1 |
| Gender | Female | 3,307 | 5.4 | 3.5 | 24.8 | 34.5 | 31.8 | 3,266 | 15.5 | 12.8 | 31.0 | 22.6 | 18.1 |
|  | Male | 3,845 | 6.8 | 4.9 | 26.7 | 34.4 | 27.2 | 3,770 | 19.5 | 16.1 | 32.3 | 17.8 | 14.3 |
|  | Missing | 95 | 5.3 | 4.2 | 24.2 | 41.1 | 25.3 | 92 | 12.0 | 16.3 | 32.6 | 21.7 | 17.4 |
| Ethnicity | American Indian or Alaskan Native | 17 | 11.8 | 5.9 | 11.8 | 35.3 | 35.3 | 17 | 23.5 | 0.0 | 47.1 | 11.8 | 17.6 |
|  | Asian | 1,467 | 3.6 | 3.7 | 24.1 | 32.9 | 35.8 | 1,451 | 10.5 | 12.1 | 30.3 | 24.7 | 22.3 |
|  | Black or African American | 1,406 | 4.5 | 4.0 | 27.0 | 35.7 | 28.9 | 1,385 | 15.5 | 12.4 | 35.2 | 22.3 | 14.6 |
|  | Hispanic or Latino | 2,241 | 7.2 | 5.0 | 27.9 | 34.6 | 25.2 | 2,209 | 21.9 | 17.4 | 31.9 | 17.2 | 11.6 |
|  | Native Hawaiian or Other Pacific Islander | 45 | 4.4 | 2.2 | 31.1 | 40.0 | 22.2 | 45 | 13.3 | 17.8 | 31.1 | 20.0 | 17.8 |
|  | Two or More Races | 950 | 12.4 | 4.5 | 25.7 | 34.7 | 22.6 | 921 | 28.6 | 15.9 | 28.1 | 15.2 | 12.3 |
|  | White | 1,099 | 3.9 | 3.5 | 22.5 | 34.7 | 35.5 | 1,078 | 11.5 | 14.1 | 31.6 | 21.0 | 21.8 |
|  | Other/Unknown | 22 | 13.6 | 9.1 | 13.6 | 31.8 | 31.8 | 22 | 22.7 | 9.1 | 31.8 | 18.2 | 18.2 |
| Other | Gifted | 36 | 0.0 | 0.0 | 13.9 | 30.6 | 55.6 | 36 | 0.0 | 11.1 | 19.4 | 25.0 | 44.4 |
|  | Home Schooled | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | IEP | 601 | 14.3 | 12.0 | 37.6 | 26.3 | 9.8 | 524 | 39.7 | 22.5 | 26.7 | 7.3 | 3.8 |
|  | Migrant | 20 | 10.0 | 10.0 | 20.0 | 35.0 | 25.0 | 20 | 30.0 | 10.0 | 25.0 | 20.0 | 15.0 |
| Primary Disability | Autism | 95 | 27.4 | 18.9 | 37.9 | 8.4 | 7.4 | 71 | 36.6 | 22.5 | 26.8 | 8.5 | 5.6 |
|  | Developmental delay | 4 | 75.0 | 0.0 | 25.0 | 0.0 | 0.0 | 2 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 9 | 0.0 | 11.1 | 66.7 | 22.2 | 0.0 | 9 | 77.8 | 0.0 | 22.2 | 0.0 | 0.0 |
|  | Hearing Impaired | 6 | 0.0 | 16.7 | 50.0 | 33.3 | 0.0 | 9 | 55.6 | 11.1 | 33.3 | 0.0 | 0.0 |
|  | Intellectual Disability | 38 | 31.6 | 21.1 | 39.5 | 7.9 | 0.0 | 30 | 63.3 | 23.3 | 13.3 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Multiple disabilities | 35 | 71.4 | 17.1 | 8.6 | 0.0 | 2.9 | 9 | 88.9 | 11.1 | 0.0 | 0.0 | 0.0 |
|  | Orthopedic impairment | 5 | 0.0 | 20.0 | 40.0 | 40.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Other health impairment | 77 | 6.5 | 11.7 | 40.3 | 28.6 | 13.0 | 71 | 36.6 | 28.2 | 26.8 | 5.6 | 2.8 |
|  | Specific learning disability | 186 | 3.8 | 11.8 | 44.6 | 31.2 | 8.6 | 177 | 49.7 | 22.6 | 22.6 | 3.4 | 1.7 |
|  | Speech or language impairment | 142 | 4.9 | 5.6 | 30.3 | 41.5 | 17.6 | 141 | 18.4 | 22.0 | 36.2 | 15.6 | 7.8 |
|  | Traumatic brain injury | 2 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 2 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |
|  | Visual impairment | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 2 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 |

Table S2.3: Summative Performance Level by Domain - Grade 2 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 7,001 | 14.7 | 15.9 | 15.8 | 22.6 | 31.0 | 7,081 | 16.1 | 14.7 | 33.0 | 19.9 | 16.3 |
| Gender | Female | 3,220 | 12.6 | 14.9 | 15.1 | 23.0 | 34.3 | 3,248 | 13.6 | 13.2 | 32.4 | 21.7 | 19.1 |
|  | Male | 3,692 | 16.5 | 16.8 | 16.6 | 22.1 | 28.0 | 3,740 | 18.3 | 16.1 | 33.6 | 18.3 | 13.8 |
|  | Missing | 89 | 12.4 | 13.5 | 12.4 | 29.2 | 32.6 | 93 | 14.0 | 12.9 | 33.3 | 19.4 | 20.4 |
| Ethnicity | American Indian or Alaskan Native | 17 | 23.5 | 5.9 | 17.6 | 23.5 | 29.4 | 17 | 23.5 | 0.0 | 47.1 | 23.5 | 5.9 |
|  | Asian | 1,427 | 12.9 | 13.6 | 13.8 | 22.7 | 37.0 | 1,443 | 9.9 | 12.3 | 31.8 | 24.2 | 21.8 |
|  | Black or African American | 1,355 | 10.6 | 17.6 | 17.3 | 22.8 | 31.7 | 1,378 | 14.9 | 12.8 | 36.0 | 20.2 | 16.1 |
|  | Hispanic or Latino | 2,173 | 18.0 | 17.8 | 16.8 | 22.4 | 24.9 | 2,185 | 19.6 | 18.0 | 33.5 | 16.9 | 11.9 |
|  | Native Hawaiian or Other Pacific Islander | 40 | 20.0 | 10.0 | 12.5 | 27.5 | 30.0 | 45 | 11.1 | 13.3 | 28.9 | 26.7 | 20.0 |
|  | Two or More Races | 913 | 21.0 | 17.9 | 16.4 | 20.2 | 24.5 | 922 | 25.4 | 16.2 | 29.8 | 16.8 | 11.8 |
|  | White | 1,057 | 9.8 | 11.4 | 14.3 | 24.4 | 40.1 | 1,069 | 10.9 | 12.7 | 32.5 | 21.9 | 22.1 |
|  | Other/Unknown | 19 | 5.3 | 26.3 | 10.5 | 36.8 | 21.1 | 22 | 18.2 | 18.2 | 27.3 | 22.7 | 13.6 |
| Other | Gifted | 37 | 2.7 | 8.1 | 8.1 | 24.3 | 56.8 | 36 | 0.0 | 0.0 | 27.8 | 30.6 | 41.7 |
|  | Home Schooled | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | IEP | 524 | 32.4 | 26.0 | 15.5 | 14.7 | 11.5 | 524 | 38.4 | 24.2 | 27.3 | 6.3 | 3.8 |
|  | Migrant | 20 | 25.0 | 5.0 | 20.0 | 20.0 | 30.0 | 20 | 20.0 | 25.0 | 20.0 | 20.0 | 15.0 |
| Primary Disability | Autism | 67 | 58.2 | 13.4 | 7.5 | 10.4 | 10.4 | 71 | 38.0 | 19.7 | 33.8 | 4.2 | 4.2 |
|  | Developmental delay | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 2 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 9 | 44.4 | 44.4 | 11.1 | 0.0 | 0.0 | 9 | 77.8 | 11.1 | 11.1 | 0.0 | 0.0 |
|  | Hearing Impaired | 5 | 40.0 | 0.0 | 0.0 | 40.0 | 20.0 | 8 | 62.5 | 0.0 | 25.0 | 12.5 | 0.0 |
|  | Intellectual Disability | 30 | 56.7 | 36.7 | 3.3 | 0.0 | 3.3 | 30 | 70.0 | 13.3 | 16.7 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Multiple disabilities | 12 | 83.3 | 16.7 | 0.0 | 0.0 | 0.0 | 11 | 90.9 | 9.1 | 0.0 | 0.0 | 0.0 |
|  | Orthopedic impairment | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 75 | 20.0 | 33.3 | 24.0 | 10.7 | 12.0 | 72 | 37.5 | 23.6 | 27.8 | 9.7 | 1.4 |
|  | Specific learning disability | 178 | 27.5 | 32.0 | 12.9 | 19.1 | 8.4 | 177 | 43.5 | 26.6 | 23.7 | 5.6 | 0.6 |
|  | Speech or language impairment | 141 | 23.4 | 17.7 | 22.0 | 17.7 | 19.1 | 139 | 18.0 | 27.3 | 35.3 | 8.6 | 10.8 |
|  | Traumatic brain injury | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |
|  | Visual impairment | 2 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 2 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.4: Summative Performance Level by Domain - Grade 3

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 5,814 | 6.5 | 3.9 | 24.5 | 41.0 | 24.1 | 5,726 | 21.4 | 15.1 | 39.4 | 15.5 | 8.6 |
| Gender | Female | 2,590 | 6.0 | 4.0 | 24.1 | 40.0 | 26.0 | 2,554 | 18.7 | 13.5 | 40.6 | 16.6 | 10.6 |
|  | Male | 3,198 | 6.8 | 3.9 | 25.0 | 41.7 | 22.6 | 3,146 | 23.6 | 16.3 | 38.5 | 14.7 | 6.9 |
|  | Missing | 26 | 19.2 | 0.0 | 19.2 | 46.2 | 15.4 | 26 | 23.1 | 23.1 | 34.6 | 15.4 | 3.8 |
| Ethnicity | American Indian or Alaskan Native | 11 | 27.3 | 0.0 | 27.3 | 36.4 | 9.1 | 11 | 36.4 | 0.0 | 45.5 | 0.0 | 18.2 |
|  | Asian | 991 | 4.1 | 4.0 | 21.9 | 39.6 | 30.4 | 977 | 14.7 | 12.7 | 38.8 | 20.3 | 13.5 |
|  | Black or African American | 1,202 | 5.3 | 2.9 | 26.7 | 43.6 | 21.5 | 1,185 | 19.8 | 17.0 | 42.9 | 13.1 | 7.3 |
|  | Hispanic or Latino | 1,879 | 8.0 | 4.4 | 25.4 | 40.4 | 21.8 | 1,850 | 25.6 | 15.7 | 38.1 | 13.6 | 7.0 |
|  | Native Hawaiian or Other Pacific Islander | 50 | 0.0 | 2.0 | 30.0 | 48.0 | 20.0 | 50 | 12.0 | 18.0 | 40.0 | 20.0 | 10.0 |
|  | Two or More Races | 882 | 10.1 | 4.3 | 23.8 | 40.4 | 21.4 | 865 | 27.6 | 15.0 | 38.5 | 12.9 | 5.9 |
|  | White | 791 | 4.0 | 3.8 | 23.1 | 40.1 | 29.0 | 780 | 15.6 | 14.1 | 39.0 | 20.4 | 10.9 |
|  | Other/Unknown | 8 | 0.0 | 12.5 | 0.0 | 62.5 | 25.0 | 8 | 25.0 | 12.5 | 37.5 | 25.0 | 0.0 |
| Other | Gifted | 30 | 0.0 | 0.0 | 16.7 | 33.3 | 50.0 | 29 | 3.4 | 6.9 | 37.9 | 31.0 | 20.7 |
|  | IEP | 791 | 10.0 | 7.0 | 42.1 | 32.0 | 9.0 | 706 | 45.6 | 21.4 | 25.2 | 6.5 | 1.3 |
|  | Migrant | 28 | 10.7 | 7.1 | 14.3 | 32.1 | 35.7 | 29 | 34.5 | 3.4 | 41.4 | 10.3 | 10.3 |
| Primary Disability | Autism | 88 | 33.0 | 11.4 | 31.8 | 18.2 | 5.7 | 63 | 44.4 | 20.6 | 30.2 | 3.2 | 1.6 |
|  | Developmental delay | 6 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 3 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 17 | 5.9 | 0.0 | 52.9 | 29.4 | 11.8 | 16 | 50.0 | 18.8 | 12.5 | 18.8 | 0.0 |
|  | Hearing Impaired | 8 | 12.5 | 0.0 | 50.0 | 0.0 | 37.5 | 8 | 25.0 | 37.5 | 25.0 | 0.0 | 12.5 |
|  | Intellectual Disability | 41 | 14.6 | 19.5 | 53.7 | 12.2 | 0.0 | 33 | 75.8 | 9.1 | 15.2 | 0.0 | 0.0 |
|  | Multiple disabilities | 32 | 75.0 | 12.5 | 12.5 | 0.0 | 0.0 | 12 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 5 | 0.0 | 0.0 | 0.0 | 60.0 | 40.0 | 6 | 16.7 | 0.0 | 16.7 | 50.0 | 16.7 |
|  | Other health impairment | 111 | 3.6 | 8.1 | 47.7 | 29.7 | 10.8 | 101 | 49.5 | 24.8 | 18.8 | 4.0 | 3.0 |
|  | Specific learning disability | 395 | 4.1 | 5.3 | 47.8 | 36.5 | 6.3 | 375 | 49.9 | 21.3 | 24.0 | 4.3 | 0.5 |
|  | Speech or language impairment | 94 | 1.1 | 0.0 | 22.3 | 51.1 | 25.5 | 94 | 7.4 | 26.6 | 41.5 | 21.3 | 3.2 |
|  | Traumatic brain injury | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0 |  |  |  |  |  |
|  | Visual impairment | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0 |  |  |  |  |  |

* Domains with Exemption or Not Attempted are excluded.

Table S2.4: Summative Performance Level by Domain - Grade 3 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 5,643 | 12.7 | 9.8 | 15.9 | 28.8 | 32.8 | 5,701 | 20.0 | 15.5 | 37.4 | 17.7 | 9.4 |
| Gender | Female | 2,519 | 11.2 | 9.2 | 14.2 | 29.1 | 36.4 | 2,547 | 17.9 | 14.7 | 36.7 | 18.9 | 11.8 |
|  | Male | 3,098 | 13.9 | 10.2 | 17.2 | 28.7 | 30.0 | 3,128 | 21.8 | 16.0 | 37.9 | 16.8 | 7.5 |
|  | Missing | 26 | 19.2 | 15.4 | 26.9 | 15.4 | 23.1 | 26 | 23.1 | 15.4 | 46.2 | 7.7 | 7.7 |
| Ethnicity | American Indian or Alaskan Native | 10 | 30.0 | 0.0 | 0.0 | 60.0 | 10.0 | 11 | 27.3 | 18.2 | 27.3 | 18.2 | 9.1 |
|  | Asian | 965 | 9.5 | 9.1 | 13.6 | 26.9 | 40.8 | 971 | 13.7 | 14.5 | 36.5 | 21.5 | 13.8 |
|  | Black or African American | 1,177 | 10.3 | 10.5 | 19.6 | 29.3 | 30.3 | 1,176 | 18.2 | 17.6 | 40.2 | 16.2 | 7.7 |
|  | Hispanic or Latino | 1,840 | 15.3 | 10.2 | 15.8 | 29.8 | 28.9 | 1,848 | 23.9 | 15.9 | 37.3 | 15.0 | 7.8 |
|  | Native Hawaiian or Other Pacific Islander | 50 | 4.0 | 8.0 | 22.0 | 40.0 | 26.0 | 50 | 6.0 | 16.0 | 42.0 | 26.0 | 10.0 |
|  | Two or More Races | 845 | 17.8 | 9.8 | 16.9 | 27.9 | 27.6 | 861 | 26.7 | 15.1 | 35.7 | 15.7 | 6.9 |
|  | White | 749 | 9.1 | 8.7 | 12.0 | 27.4 | 42.9 | 777 | 15.2 | 12.6 | 36.2 | 22.9 | 13.1 |
|  | Other/Unknown | 7 | 0.0 | 14.3 | 0.0 | 71.4 | 14.3 | 7 | 0.0 | 14.3 | 42.9 | 42.9 | 0.0 |
| Other | Gifted | 30 | 0.0 | 6.7 | 6.7 | 26.7 | 60.0 | 29 | 3.4 | 3.4 | 41.4 | 17.2 | 34.5 |
|  | IEP | 709 | 22.4 | 20.0 | 20.3 | 24.1 | 13.1 | 703 | 43.8 | 24.2 | 23.9 | 5.7 | 2.4 |
|  | Migrant | 29 | 24.1 | 10.3 | 3.4 | 24.1 | 37.9 | 28 | 32.1 | 3.6 | 39.3 | 10.7 | 14.3 |
| Primary Disability | Autism | 58 | 37.9 | 24.1 | 17.2 | 13.8 | 6.9 | 58 | 37.9 | 19.0 | 34.5 | 8.6 | 0.0 |
|  | Developmental delay | 3 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 | 3 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 18 | 22.2 | 16.7 | 11.1 | 44.4 | 5.6 | 16 | 50.0 | 25.0 | 12.5 | 6.3 | 6.3 |
|  | Hearing Impaired | 7 | 42.9 | 0.0 | 14.3 | 28.6 | 14.3 | 8 | 12.5 | 37.5 | 37.5 | 12.5 | 0.0 |
|  | Intellectual Disability | 33 | 33.3 | 42.4 | 12.1 | 12.1 | 0.0 | 30 | 83.3 | 6.7 | 10.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 13 | 76.9 | 15.4 | 7.7 | 0.0 | 0.0 | 13 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 5 | 0.0 | 20.0 | 0.0 | 20.0 | 60.0 | 5 | 0.0 | 20.0 | 0.0 | 60.0 | 20.0 |
|  | Other health impairment | 105 | 21.9 | 27.6 | 18.1 | 18.1 | 14.3 | 102 | 45.1 | 24.5 | 20.6 | 5.9 | 3.9 |
|  | Specific learning disability | 381 | 21.0 | 17.6 | 23.6 | 24.7 | 13.1 | 381 | 47.8 | 27.0 | 20.5 | 2.6 | 2.1 |
|  | Speech or language impairment | 91 | 6.6 | 11.0 | 17.6 | 38.5 | 26.4 | 93 | 12.9 | 20.4 | 47.3 | 17.2 | 2.2 |
|  | Traumatic brain injury | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |  |  |  |  |  |
|  | Visual impairment | 0 |  |  |  |  |  | 0 |  |  |  |  |  |

* Domains with Exemption or Not Attempted are excluded.

Table S2.5: Summative Performance Level by Domain - Grade 4

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 4,383 | 7.6 | 5.7 | 14.9 | 35.3 | 36.4 | 4,288 | 18.0 | 12.6 | 31.0 | 22.0 | 16.5 |
| Gender | Female | 1,929 | 6.8 | 5.3 | 14.7 | 35.5 | 37.7 | 1,897 | 15.6 | 12.3 | 30.8 | 23.7 | 17.7 |
|  | Male | 2,400 | 8.0 | 6.1 | 15.2 | 35.2 | 35.5 | 2,338 | 19.6 | 13.0 | 30.9 | 20.9 | 15.6 |
|  | Missing | 54 | 16.7 | 5.6 | 13.0 | 35.2 | 29.6 | 53 | 30.2 | 9.4 | 37.7 | 9.4 | 13.2 |
| Ethnicity | American Indian or Alaskan Native | 9 | 11.1 | 0.0 | 33.3 | 22.2 | 33.3 | 9 | 33.3 | 11.1 | 0.0 | 33.3 | 22.2 |
|  | Asian | 655 | 5.3 | 4.1 | 11.6 | 32.7 | 46.3 | 641 | 10.5 | 9.8 | 27.6 | 25.6 | 26.5 |
|  | Black or African American | 847 | 6.6 | 3.4 | 14.4 | 40.4 | 35.2 | 832 | 14.8 | 12.1 | 37.6 | 21.3 | 14.2 |
|  | Hispanic or Latino | 1,547 | 8.0 | 7.4 | 16.4 | 34.5 | 33.8 | 1,504 | 20.8 | 13.4 | 30.3 | 20.6 | 14.9 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 3.3 | 10.0 | 6.7 | 50.0 | 30.0 | 30 | 13.3 | 13.3 | 40.0 | 20.0 | 13.3 |
|  | Two or More Races | 681 | 10.9 | 7.3 | 15.1 | 32.7 | 33.9 | 663 | 24.4 | 14.3 | 27.8 | 21.1 | 12.4 |
|  | White | 606 | 6.9 | 4.6 | 15.5 | 35.6 | 37.3 | 601 | 16.1 | 12.3 | 30.6 | 23.6 | 17.3 |
|  | Other/Unknown | 8 | 0.0 | 12.5 | 12.5 | 50.0 | 25.0 | 8 | 12.5 | 25.0 | 25.0 | 12.5 | 25.0 |
| Other | Gifted | 21 | 0.0 | 0.0 | 19.0 | 28.6 | 52.4 | 21 | 9.5 | 14.3 | 23.8 | 23.8 | 28.6 |
|  | IEP | 816 | 10.2 | 7.6 | 28.6 | 35.3 | 18.4 | 722 | 28.1 | 22.4 | 31.4 | 14.0 | 4.0 |
|  | Migrant | 19 | 10.5 | 0.0 | 42.1 | 10.5 | 36.8 | 18 | 22.2 | 22.2 | 22.2 | 11.1 | 22.2 |
| Primary Disability | Autism | 85 | 36.5 | 9.4 | 24.7 | 18.8 | 10.6 | 59 | 42.4 | 16.9 | 25.4 | 10.2 | 5.1 |
|  | Deaf-blindness | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Developmental delay | 6 | 16.7 | 50.0 | 33.3 | 0.0 | 0.0 | 5 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 11 | 0.0 | 0.0 | 45.5 | 45.5 | 9.1 | 11 | 18.2 | 54.5 | 18.2 | 9.1 | 0.0 |
|  | Hearing Impaired | 7 | 14.3 | 14.3 | 14.3 | 28.6 | 28.6 | 8 | 12.5 | 12.5 | 50.0 | 12.5 | 12.5 |
|  | Intellectual Disability | 51 | 25.5 | 31.4 | 25.5 | 17.6 | 0.0 | 33 | 66.7 | 18.2 | 15.2 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Multiple disabilities | 23 | 87.0 | 4.3 | 8.7 | 0.0 | 0.0 | 9 | 88.9 | 0.0 | 11.1 | 0.0 | 0.0 |
|  | Orthopedic impairment | 5 | 20.0 | 0.0 | 0.0 | 60.0 | 20.0 | 4 | 25.0 | 0.0 | 75.0 | 0.0 | 0.0 |
|  | Other health impairment | 102 | 3.9 | 7.8 | 35.3 | 38.2 | 14.7 | 93 | 29.0 | 22.6 | 32.3 | 11.8 | 4.3 |
|  | Specific learning disability | 466 | 1.9 | 5.4 | 31.5 | 39.3 | 21.9 | 444 | 25.0 | 24.8 | 32.9 | 13.3 | 4.1 |
|  | Speech or language impairment | 53 | 1.9 | 0.0 | 11.3 | 50.9 | 35.8 | 50 | 2.0 | 16.0 | 40.0 | 38.0 | 4.0 |
|  | Traumatic brain injury | 3 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 0.0 | 0.0 | 33.3 | 66.7 | 0.0 | 2 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.5: Summative Performance Level by Domain - Grade 4 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 4,242 | 13.4 | 8.7 | 14.5 | 26.9 | 36.4 | 4,264 | 15.7 | 10.2 | 46.2 | 15.9 | 12.1 |
| Gender | Female | 1,880 | 11.8 | 7.6 | 13.9 | 27.1 | 39.6 | 1,880 | 13.5 | 9.2 | 46.7 | 16.9 | 13.8 |
|  | Male | 2,309 | 14.3 | 9.6 | 15.0 | 27.0 | 34.1 | 2,330 | 17.2 | 10.9 | 46.0 | 15.1 | 10.8 |
|  | Missing | 53 | 28.3 | 9.4 | 17.0 | 20.8 | 24.5 | 54 | 25.9 | 9.3 | 40.7 | 14.8 | 9.3 |
| Ethnicity | American Indian or Alaskan Native | 9 | 22.2 | 0.0 | 22.2 | 22.2 | 33.3 | 8 | 25.0 | 12.5 | 25.0 | 12.5 | 25.0 |
|  | Asian | 632 | 8.5 | 6.5 | 14.9 | 24.4 | 45.7 | 642 | 9.2 | 9.0 | 42.2 | 19.5 | 20.1 |
|  | Black or African American | 824 | 11.4 | 8.3 | 15.7 | 29.0 | 35.7 | 827 | 13.2 | 8.6 | 53.1 | 15.0 | 10.2 |
|  | Hispanic or Latino | 1,493 | 15.2 | 10.0 | 14.7 | 27.5 | 32.6 | 1,497 | 18.6 | 10.6 | 44.5 | 15.8 | 10.5 |
|  | Native Hawaiian or Other Pacific Islander | 29 | 10.3 | 10.3 | 10.3 | 31.0 | 37.9 | 30 | 10.0 | 10.0 | 56.7 | 10.0 | 13.3 |
|  | Two or More Races | 658 | 18.7 | 7.3 | 15.2 | 26.4 | 32.4 | 662 | 22.5 | 11.2 | 44.1 | 13.9 | 8.3 |
|  | White | 589 | 10.9 | 9.8 | 11.5 | 25.8 | 41.9 | 590 | 11.2 | 11.4 | 47.5 | 16.1 | 13.9 |
|  | Other/Unknown | 8 | 12.5 | 0.0 | 12.5 | 37.5 | 37.5 | 8 | 12.5 | 12.5 | 50.0 | 0.0 | 25.0 |
| Other | Gifted | 19 | 0.0 | 5.3 | 15.8 | 31.6 | 47.4 | 21 | 4.8 | 14.3 | 38.1 | 14.3 | 28.6 |
|  | IEP | 739 | 16.0 | 14.5 | 23.8 | 27.5 | 18.3 | 729 | 25.0 | 19.9 | 45.0 | 6.4 | 3.7 |
|  | Migrant | 19 | 21.1 | 5.3 | 26.3 | 26.3 | 21.1 | 19 | 26.3 | 21.1 | 26.3 | 15.8 | 10.5 |
| Primary Disability | Autism | 53 | 30.2 | 32.1 | 15.1 | 18.9 | 3.8 | 56 | 35.7 | 16.1 | 39.3 | 7.1 | 1.8 |
|  | Deaf-blindness | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Developmental delay | 6 | 83.3 | 16.7 | 0.0 | 0.0 | 0.0 | 5 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 11 | 9.1 | 18.2 | 27.3 | 36.4 | 9.1 | 11 | 27.3 | 27.3 | 36.4 | 0.0 | 9.1 |
|  | Hearing Impaired | 8 | 25.0 | 12.5 | 12.5 | 12.5 | 37.5 | 8 | 25.0 | 12.5 | 50.0 | 0.0 | 12.5 |
|  | Intellectual Disability | 40 | 67.5 | 10.0 | 15.0 | 7.5 | 0.0 | 35 | 65.7 | 14.3 | 20.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Multiple disabilities | 6 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8 | 87.5 | 12.5 | 0.0 | 0.0 | 0.0 |
|  | Orthopedic impairment | 5 | 40.0 | 0.0 | 40.0 | 20.0 | 0.0 | 5 | 40.0 | 20.0 | 40.0 | 0.0 | 0.0 |
|  | Other health impairment | 97 | 18.6 | 15.5 | 24.7 | 21.6 | 19.6 | 95 | 29.5 | 17.9 | 42.1 | 6.3 | 4.2 |
|  | Specific learning disability | 458 | 8.5 | 13.8 | 26.0 | 32.1 | 19.7 | 449 | 20.3 | 22.0 | 47.2 | 6.7 | 3.8 |
|  | Speech or language impairment | 49 | 2.0 | 8.2 | 20.4 | 36.7 | 32.7 | 51 | 2.0 | 17.6 | 62.7 | 13.7 | 3.9 |
|  | Traumatic brain injury | 2 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |
|  | Visual impairment | 2 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 2 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.6: Summative Performance Level by Domain - Grade 5

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,951 | 10.5 | 7.0 | 10.1 | 37.6 | 34.9 | 3,829 | 18.7 | 14.7 | 37.6 | 17.0 | 12.0 |
| Gender | Female | 1,790 | 9.6 | 7.3 | 10.2 | 37.2 | 35.9 | 1,748 | 17.1 | 14.8 | 37.9 | 17.3 | 12.9 |
|  | Male | 2,109 | 11.0 | 6.9 | 10.1 | 38.2 | 33.7 | 2,030 | 20.0 | 14.8 | 37.3 | 16.6 | 11.3 |
|  | Missing | 52 | 19.2 | 1.9 | 5.8 | 26.9 | 46.2 | 51 | 19.6 | 5.9 | 41.2 | 23.5 | 9.8 |
| Ethnicity | American Indian or Alaskan Native | 10 | 20.0 | 10.0 | 20.0 | 40.0 | 10.0 | 10 | 20.0 | 30.0 | 30.0 | 10.0 | 10.0 |
|  | Asian | 582 | 7.0 | 7.7 | 8.9 | 36.6 | 39.7 | 564 | 14.7 | 13.8 | 37.1 | 18.4 | 16.0 |
|  | Black or African American | 773 | 12.2 | 6.5 | 10.2 | 39.8 | 31.3 | 753 | 20.5 | 14.6 | 39.2 | 15.4 | 10.4 |
|  | Hispanic or Latino | 1,428 | 11.3 | 7.6 | 9.7 | 37.8 | 33.6 | 1,376 | 19.9 | 14.2 | 36.5 | 18.1 | 11.3 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 16.7 | 0.0 | 10.0 | 46.7 | 26.7 | 27 | 14.8 | 11.1 | 59.3 | 7.4 | 7.4 |
|  | Two or More Races | 625 | 11.0 | 6.4 | 12.6 | 37.1 | 32.8 | 606 | 20.1 | 16.7 | 39.9 | 14.4 | 8.9 |
|  | White | 495 | 8.3 | 6.5 | 9.3 | 34.7 | 41.2 | 485 | 15.7 | 14.4 | 35.7 | 17.9 | 16.3 |
|  | Other/Unknown | 8 | 0.0 | 0.0 | 0.0 | 25.0 | 75.0 | 8 | 0.0 | 25.0 | 12.5 | 62.5 | 0.0 |
| Other | Gifted | 12 | 8.3 | 0.0 | 0.0 | 41.7 | 50.0 | 13 | 7.7 | 7.7 | 38.5 | 23.1 | 23.1 |
|  | IEP | 810 | 11.1 | 10.1 | 15.6 | 43.8 | 19.4 | 701 | 23.8 | 22.7 | 40.5 | 8.4 | 4.6 |
|  | Migrant | 17 | 11.8 | 17.6 | 5.9 | 35.3 | 29.4 | 16 | 31.3 | 12.5 | 18.8 | 25.0 | 12.5 |
| Primary Disability | Autism | 57 | 35.1 | 17.5 | 19.3 | 22.8 | 5.3 | 31 | 45.2 | 12.9 | 32.3 | 6.5 | 3.2 |
|  | Developmental delay | 6 | 16.7 | 33.3 | 33.3 | 16.7 | 0.0 | 4 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 15 | 13.3 | 6.7 | 33.3 | 26.7 | 20.0 | 15 | 40.0 | 33.3 | 6.7 | 6.7 | 13.3 |
|  | Hearing Impaired | 6 | 16.7 | 16.7 | 0.0 | 16.7 | 50.0 | 9 | 44.4 | 11.1 | 11.1 | 22.2 | 11.1 |
|  | Intellectual Disability | 63 | 30.2 | 25.4 | 23.8 | 19.0 | 1.6 | 40 | 57.5 | 27.5 | 15.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 37 | 83.8 | 8.1 | 5.4 | 2.7 | 0.0 | 5 | 80.0 | 20.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 6 | 0.0 | 16.7 | 16.7 | 50.0 | 16.7 | 5 | 20.0 | 40.0 | 40.0 | 0.0 | 0.0 |
|  | Other health impairment | 102 | 5.9 | 10.8 | 15.7 | 51.0 | 16.7 | 95 | 24.2 | 24.2 | 37.9 | 8.4 | 5.3 |
|  | Specific learning disability | 481 | 2.3 | 7.1 | 15.6 | 51.8 | 23.3 | 460 | 19.1 | 22.6 | 45.0 | 9.3 | 3.9 |
|  | Speech or language impairment | 28 | 3.6 | 3.6 | 0.0 | 46.4 | 46.4 | 28 | 3.6 | 21.4 | 50.0 | 10.7 | 14.3 |
|  | Traumatic brain injury | 6 | 50.0 | 16.7 | 0.0 | 16.7 | 16.7 | 3 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 0.0 | 33.3 | 0.0 | 66.7 | 0.0 | 3 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.6: Summative Performance Level by Domain - Grade 5 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,801 | 15.6 | 9.4 | 22.1 | 24.1 | 28.7 | 3,799 | 13.3 | 9.7 | 54.8 | 12.1 | 10.2 |
| Gender | Female | 1,717 | 14.6 | 9.1 | 20.7 | 23.7 | 31.9 | 1,730 | 12.3 | 9.4 | 53.9 | 12.7 | 11.8 |
|  | Male | 2,033 | 16.4 | 9.7 | 23.0 | 24.5 | 26.4 | 2,018 | 13.9 | 10.2 | 55.5 | 11.5 | 8.8 |
|  | Missing | 51 | 19.6 | 7.8 | 33.3 | 21.6 | 17.6 | 51 | 23.5 | 0.0 | 54.9 | 13.7 | 7.8 |
| Ethnicity | American Indian or Alaskan Native | 10 | 40.0 | 20.0 | 0.0 | 20.0 | 20.0 | 10 | 30.0 | 10.0 | 50.0 | 0.0 | 10.0 |
|  | Asian | 558 | 11.8 | 10.8 | 22.0 | 23.7 | 31.7 | 563 | 9.2 | 9.9 | 56.0 | 10.5 | 14.4 |
|  | Black or African American | 754 | 17.6 | 8.8 | 19.8 | 28.0 | 25.9 | 750 | 14.3 | 10.1 | 55.7 | 10.3 | 9.6 |
|  | Hispanic or Latino | 1,379 | 16.3 | 9.9 | 22.3 | 24.1 | 27.4 | 1,356 | 14.7 | 9.7 | 54.2 | 12.6 | 8.8 |
|  | Native Hawaiian or Other Pacific Islander | 29 | 24.1 | 3.4 | 20.7 | 24.1 | 27.6 | 28 | 10.7 | 14.3 | 57.1 | 7.1 | 10.7 |
|  | Two or More Races | 589 | 15.6 | 10.0 | 25.6 | 22.4 | 26.3 | 603 | 14.8 | 8.8 | 56.7 | 13.1 | 6.6 |
|  | White | 474 | 14.1 | 7.2 | 21.7 | 20.5 | 36.5 | 481 | 10.8 | 10.0 | 50.5 | 14.6 | 14.1 |
|  | Other/Unknown | 8 | 0.0 | 0.0 | 25.0 | 25.0 | 50.0 | 8 | 0.0 | 0.0 | 75.0 | 12.5 | 12.5 |
| Other | Gifted | 13 | 7.7 | 0.0 | 30.8 | 23.1 | 38.5 | 13 | 0.0 | 15.4 | 38.5 | 30.8 | 15.4 |
|  | IEP | 726 | 15.4 | 13.5 | 31.3 | 20.9 | 18.9 | 707 | 11.9 | 18.0 | 61.1 | 6.2 | 2.8 |
|  | Migrant | 16 | 25.0 | 12.5 | 12.5 | 12.5 | 37.5 | 16 | 25.0 | 12.5 | 37.5 | 12.5 | 12.5 |
| Primary Disability | Autism | 32 | 34.4 | 18.8 | 25.0 | 9.4 | 12.5 | 30 | 26.7 | 23.3 | 40.0 | 6.7 | 3.3 |
|  | Developmental delay | 4 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 15 | 13.3 | 20.0 | 40.0 | 0.0 | 26.7 | 16 | 18.8 | 31.3 | 37.5 | 6.3 | 6.3 |
|  | Hearing Impaired | 7 | 42.9 | 0.0 | 0.0 | 14.3 | 42.9 | 9 | 44.4 | 11.1 | 22.2 | 22.2 | 0.0 |
|  | Intellectual Disability | 50 | 48.0 | 24.0 | 20.0 | 4.0 | 4.0 | 39 | 41.0 | 20.5 | 38.5 | 0.0 | 0.0 |
|  | Multiple disabilities | 9 | 77.8 | 22.2 | 0.0 | 0.0 | 0.0 | 5 | 60.0 | 40.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 4 | 0.0 | 0.0 | 75.0 | 0.0 | 25.0 | 4 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Other health impairment | 94 | 14.9 | 20.2 | 29.8 | 22.3 | 12.8 | 95 | 12.6 | 17.9 | 58.9 | 8.4 | 2.1 |
|  | Specific learning disability | 472 | 9.7 | 11.0 | 33.1 | 24.4 | 21.8 | 468 | 7.7 | 17.7 | 66.2 | 5.3 | 3.0 |
|  | Speech or language impairment | 29 | 0.0 | 13.8 | 37.9 | 27.6 | 20.7 | 28 | 0.0 | 3.6 | 71.4 | 21.4 | 3.6 |
|  | Traumatic brain injury | 4 | 50.0 | 0.0 | 25.0 | 25.0 | 0.0 | 3 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.7: Summative Performance Level by Domain - Grade 6

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,343 | 8.9 | 6.8 | 18.4 | 35.4 | 30.5 | 3,247 | 17.8 | 17.9 | 38.1 | 15.2 | 11.1 |
| Gender | Female | 1,450 | 8.4 | 6.3 | 19.1 | 38.1 | 28.0 | 1,420 | 16.6 | 19.1 | 38.9 | 15.4 | 9.9 |
|  | Male | 1,863 | 9.3 | 7.1 | 17.9 | 33.1 | 32.7 | 1,797 | 18.6 | 16.9 | 37.4 | 15.1 | 12.0 |
|  | Missing | 30 | 13.3 | 6.7 | 20.0 | 46.7 | 13.3 | 30 | 20.0 | 23.3 | 43.3 | 6.7 | 6.7 |
| Ethnicity | American Indian or Alaskan Native | 8 | 0.0 | 0.0 | 0.0 | 75.0 | 25.0 | 8 | 0.0 | 12.5 | 62.5 | 0.0 | 25.0 |
|  | Asian | 471 | 6.2 | 5.1 | 17.8 | 31.2 | 39.7 | 459 | 12.4 | 15.9 | 36.4 | 15.9 | 19.4 |
|  | Black or African American | 683 | 7.6 | 6.3 | 19.8 | 37.8 | 28.6 | 663 | 17.6 | 17.5 | 40.1 | 15.4 | 9.4 |
|  | Hispanic or Latino | 1,166 | 12.8 | 6.3 | 17.7 | 34.5 | 28.8 | 1,129 | 20.7 | 18.2 | 37.4 | 14.5 | 9.2 |
|  | Native Hawaiian or Other Pacific Islander | 23 | 0.0 | 8.7 | 26.1 | 43.5 | 21.7 | 23 | 26.1 | 21.7 | 26.1 | 26.1 | 0.0 |
|  | Two or More Races | 533 | 8.6 | 9.6 | 19.9 | 36.6 | 25.3 | 516 | 19.8 | 20.0 | 37.0 | 15.5 | 7.8 |
|  | White | 452 | 4.6 | 7.3 | 17.5 | 36.3 | 34.3 | 443 | 13.5 | 17.4 | 40.4 | 14.9 | 13.8 |
|  | Other/Unknown | 7 | 28.6 | 0.0 | 0.0 | 14.3 | 57.1 | 6 | 16.7 | 16.7 | 33.3 | 16.7 | 16.7 |
| Other | Gifted | 8 | 0.0 | 0.0 | 25.0 | 0.0 | 75.0 | 7 | 0.0 | 28.6 | 14.3 | 28.6 | 28.6 |
|  | Home Schooled | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | IEP | 691 | 9.7 | 6.8 | 28.5 | 38.8 | 16.2 | 618 | 23.1 | 25.7 | 39.5 | 8.1 | 3.6 |
|  | Migrant | 16 | 18.8 | 25.0 | 12.5 | 12.5 | 31.3 | 17 | 35.3 | 5.9 | 29.4 | 11.8 | 17.6 |
| Primary Disability | Autism | 49 | 36.7 | 22.4 | 16.3 | 8.2 | 16.3 | 31 | 48.4 | 16.1 | 16.1 | 9.7 | 9.7 |
|  | Developmental delay | 4 | 50.0 | 0.0 | 25.0 | 25.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 18 | 11.1 | 5.6 | 38.9 | 33.3 | 11.1 | 16 | 18.8 | 25.0 | 43.8 | 6.3 | 6.3 |
|  | Hearing Impaired | 4 | 0.0 | 0.0 | 25.0 | 50.0 | 25.0 | 6 | 0.0 | 33.3 | 33.3 | 16.7 | 16.7 |
|  | Intellectual Disability | 62 | 22.6 | 16.1 | 40.3 | 14.5 | 6.5 | 48 | 50.0 | 31.3 | 10.4 | 6.3 | 2.1 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Multiple disabilities | 27 | 77.8 | 11.1 | 11.1 | 0.0 | 0.0 | 13 | 92.3 | 7.7 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 80 | 5.0 | 6.3 | 26.3 | 48.8 | 13.8 | 76 | 25.0 | 19.7 | 46.1 | 5.3 | 3.9 |
|  | Specific learning disability | 429 | 0.9 | 3.7 | 29.1 | 46.4 | 19.8 | 407 | 15.2 | 28.0 | 45.0 | 8.6 | 3.2 |
|  | Speech or language impairment | 13 | 0.0 | 7.7 | 30.8 | 38.5 | 23.1 | 14 | 21.4 | 14.3 | 35.7 | 21.4 | 7.1 |
|  | Traumatic brain injury | 5 | 20.0 | 20.0 | 20.0 | 40.0 | 0.0 | 5 | 40.0 | 20.0 | 40.0 | 0.0 | 0.0 |
|  | Visual impairment | 2 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 2 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.7: Summative Performance Level by Domain - Grade 6 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,210 | 12.8 | 9.7 | 26.2 | 23.1 | 28.2 | 3,235 | 12.8 | 10.4 | 52.0 | 14.2 | 10.7 |
| Gender | Female | 1,402 | 12.3 | 9.0 | 26.6 | 22.5 | 29.6 | 1,416 | 11.1 | 10.1 | 53.4 | 13.8 | 11.7 |
|  | Male | 1,778 | 13.2 | 10.3 | 25.7 | 23.4 | 27.4 | 1,790 | 14.0 | 10.6 | 50.6 | 14.6 | 10.2 |
|  | Missing | 30 | 20.0 | 6.7 | 33.3 | 26.7 | 13.3 | 29 | 20.7 | 6.9 | 65.5 | 6.9 | 0.0 |
| Ethnicity | American Indian or Alaskan Native | 7 | 0.0 | 0.0 | 28.6 | 28.6 | 42.9 | 7 | 0.0 | 0.0 | 85.7 | 0.0 | 14.3 |
|  | Asian | 450 | 8.4 | 9.3 | 22.2 | 21.3 | 38.7 | 456 | 9.2 | 8.1 | 49.6 | 16.7 | 16.4 |
|  | Black or African American | 659 | 12.6 | 10.6 | 27.2 | 23.8 | 25.8 | 665 | 11.1 | 11.4 | 53.4 | 14.9 | 9.2 |
|  | Hispanic or Latino | 1,124 | 16.5 | 8.3 | 27.2 | 22.5 | 25.4 | 1,126 | 16.6 | 9.7 | 52.0 | 12.6 | 9.1 |
|  | Native Hawaiian or Other Pacific Islander | 22 | 0.0 | 31.8 | 22.7 | 27.3 | 18.2 | 23 | 13.0 | 17.4 | 52.2 | 13.0 | 4.3 |
|  | Two or More Races | 513 | 14.4 | 13.3 | 25.1 | 23.2 | 24.0 | 514 | 14.6 | 12.6 | 51.9 | 12.6 | 8.2 |
|  | White | 429 | 7.0 | 7.5 | 27.7 | 24.2 | 33.6 | 438 | 7.5 | 9.8 | 52.1 | 16.4 | 14.2 |
|  | Other/Unknown | 6 | 16.7 | 0.0 | 0.0 | 50.0 | 33.3 | 6 | 0.0 | 16.7 | 16.7 | 16.7 | 50.0 |
| Other | Gifted | 7 | 0.0 | 0.0 | 14.3 | 28.6 | 57.1 | 7 | 0.0 | 0.0 | 57.1 | 14.3 | 28.6 |
|  | Home Schooled | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | IEP | 629 | 12.7 | 14.8 | 35.9 | 22.1 | 14.5 | 620 | 15.5 | 15.3 | 59.2 | 7.6 | 2.4 |
|  | Migrant | 16 | 37.5 | 18.8 | 12.5 | 12.5 | 18.8 | 16 | 37.5 | 12.5 | 37.5 | 6.3 | 6.3 |
| Primary Disability | Autism | 31 | 41.9 | 19.4 | 6.5 | 19.4 | 12.9 | 32 | 46.9 | 9.4 | 31.3 | 9.4 | 3.1 |
|  | Developmental delay | 2 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 16 | 6.3 | 31.3 | 43.8 | 12.5 | 6.3 | 17 | 11.8 | 17.6 | 64.7 | 0.0 | 5.9 |
|  | Hearing Impaired | 3 | 0.0 | 0.0 | 0.0 | 33.3 | 66.7 | 5 | 0.0 | 0.0 | 80.0 | 20.0 | 0.0 |
|  | Intellectual Disability | 54 | 35.2 | 31.5 | 22.2 | 9.3 | 1.9 | 50 | 38.0 | 26.0 | 32.0 | 2.0 | 2.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Multiple disabilities | 12 | 83.3 | 8.3 | 8.3 | 0.0 | 0.0 | 12 | 91.7 | 8.3 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 76 | 9.2 | 11.8 | 48.7 | 23.7 | 6.6 | 76 | 11.8 | 15.8 | 64.5 | 5.3 | 2.6 |
|  | Specific learning disability | 417 | 5.3 | 12.5 | 39.3 | 24.9 | 18.0 | 408 | 7.8 | 15.2 | 65.7 | 8.8 | 2.5 |
|  | Speech or language impairment | 12 | 25.0 | 0.0 | 25.0 | 33.3 | 16.7 | 13 | 15.4 | 7.7 | 69.2 | 7.7 | 0.0 |
|  | Traumatic brain injury | 4 | 25.0 | 25.0 | 50.0 | 0.0 | 0.0 | 5 | 40.0 | 0.0 | 60.0 | 0.0 | 0.0 |
|  | Visual impairment | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.8: Summative Performance Level by Domain - Grade 7

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,224 | 15.5 | 8.7 | 32.9 | 23.8 | 19.1 | 3,169 | 27.5 | 24.3 | 34.4 | 9.0 | 4.8 |
| Gender | Female | 1,434 | 15.4 | 8.6 | 33.9 | 22.3 | 19.7 | 1,415 | 26.1 | 24.1 | 34.9 | 9.3 | 5.5 |
|  | Male | 1,772 | 15.3 | 8.8 | 32.2 | 25.0 | 18.6 | 1,737 | 28.4 | 24.6 | 34.0 | 8.8 | 4.1 |
|  | Missing | 18 | 33.3 | 5.6 | 27.8 | 22.2 | 11.1 | 17 | 41.2 | 17.6 | 29.4 | 5.9 | 5.9 |
| Ethnicity | American Indian or Alaskan Native | 5 | 20.0 | 20.0 | 40.0 | 20.0 | 0.0 | 5 | 20.0 | 40.0 | 40.0 | 0.0 | 0.0 |
|  | Asian | 435 | 6.9 | 9.4 | 37.2 | 23.4 | 23.0 | 429 | 21.0 | 24.2 | 36.1 | 11.0 | 7.7 |
|  | Black or African American | 698 | 12.6 | 7.9 | 34.7 | 23.4 | 21.5 | 689 | 22.6 | 25.3 | 36.6 | 10.2 | 5.4 |
|  | Hispanic or Latino | 1,143 | 19.2 | 8.7 | 31.9 | 24.1 | 15.9 | 1,113 | 31.7 | 24.3 | 33.5 | 7.2 | 3.2 |
|  | Native Hawaiian or Other Pacific Islander | 31 | 9.7 | 6.5 | 45.2 | 22.6 | 16.1 | 31 | 29.0 | 19.4 | 41.9 | 3.2 | 6.5 |
|  | Two or More Races | 522 | 23.0 | 8.8 | 32.8 | 21.1 | 14.4 | 514 | 35.4 | 23.5 | 30.5 | 8.2 | 2.3 |
|  | White | 388 | 9.3 | 9.3 | 27.3 | 27.6 | 26.5 | 386 | 20.5 | 23.8 | 35.8 | 11.9 | 8.0 |
|  | Other/Unknown | 2 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |
| Other | Gifted | 9 | 0.0 | 11.1 | 22.2 | 22.2 | 44.4 | 9 | 11.1 | 11.1 | 33.3 | 33.3 | 11.1 |
|  | IEP | 633 | 12.6 | 11.5 | 42.7 | 23.7 | 9.5 | 590 | 31.4 | 31.7 | 31.9 | 3.6 | 1.5 |
|  | Migrant | 11 | 27.3 | 9.1 | 27.3 | 0.0 | 36.4 | 11 | 45.5 | 9.1 | 9.1 | 27.3 | 9.1 |
| Primary Disability | Autism | 25 | 32.0 | 20.0 | 32.0 | 12.0 | 4.0 | 19 | 47.4 | 15.8 | 31.6 | 0.0 | 5.3 |
|  | Developmental delay | 5 | 60.0 | 40.0 | 0.0 | 0.0 | 0.0 | 3 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 8 | 37.5 | 0.0 | 25.0 | 25.0 | 12.5 | 7 | 28.6 | 0.0 | 71.4 | 0.0 | 0.0 |
|  | Hearing Impaired | 3 | 0.0 | 33.3 | 0.0 | 33.3 | 33.3 | 8 | 37.5 | 25.0 | 12.5 | 12.5 | 12.5 |
|  | Intellectual Disability | 52 | 32.7 | 25.0 | 38.5 | 3.8 | 0.0 | 40 | 62.5 | 25.0 | 12.5 | 0.0 | 0.0 |
|  | Multiple disabilities | 22 | 72.7 | 22.7 | 4.5 | 0.0 | 0.0 | 12 | 91.7 | 8.3 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 4 | 0.0 | 25.0 | 25.0 | 50.0 | 0.0 | 4 | 25.0 | 50.0 | 25.0 | 0.0 | 0.0 |
|  | Other health impairment | 100 | 13.0 | 7.0 | 46.0 | 28.0 | 6.0 | 95 | 25.3 | 35.8 | 35.8 | 2.1 | 1.1 |
|  | Specific learning disability | 387 | 3.9 | 9.0 | 47.0 | 27.4 | 12.7 | 376 | 25.8 | 34.6 | 33.8 | 4.5 | 1.3 |
|  | Speech or language impairment | 13 | 7.7 | 7.7 | 23.1 | 53.8 | 7.7 | 13 | 23.1 | 23.1 | 46.2 | 0.0 | 7.7 |
|  | Traumatic brain injury | 9 | 22.2 | 22.2 | 44.4 | 0.0 | 11.1 | 8 | 37.5 | 12.5 | 50.0 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 33.3 | 33.3 | 0.0 | 33.3 | 0.0 | 3 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.8: Summative Performance Level by Domain - Grade 7 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,097 | 16.5 | 11.5 | 30.6 | 19.4 | 22.1 | 3,131 | 23.4 | 17.2 | 43.4 | 9.4 | 6.5 |
| Gender | Female | 1,377 | 16.2 | 10.1 | 28.8 | 19.2 | 25.7 | 1,399 | 22.2 | 14.5 | 44.7 | 10.7 | 7.8 |
|  | Male | 1,704 | 16.5 | 12.6 | 32.2 | 19.7 | 19.1 | 1,714 | 24.3 | 19.4 | 42.4 | 8.4 | 5.5 |
|  | Missing | 16 | 31.3 | 12.5 | 12.5 | 12.5 | 31.3 | 18 | 33.3 | 16.7 | 38.9 | 5.6 | 5.6 |
| Ethnicity | American Indian or Alaskan Native | 4 | 25.0 | 25.0 | 0.0 | 25.0 | 25.0 | 5 | 20.0 | 20.0 | 60.0 | 0.0 | 0.0 |
|  | Asian | 422 | 10.2 | 10.2 | 30.6 | 19.9 | 29.1 | 425 | 17.6 | 17.2 | 47.8 | 9.4 | 8.0 |
|  | Black or African American | 667 | 12.3 | 12.1 | 32.4 | 19.8 | 23.4 | 677 | 18.6 | 19.5 | 44.2 | 10.5 | 7.2 |
|  | Hispanic or Latino | 1,109 | 20.3 | 11.5 | 30.1 | 18.6 | 19.5 | 1,102 | 27.7 | 16.2 | 41.7 | 9.1 | 5.3 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 6.7 | 23.3 | 43.3 | 13.3 | 13.3 | 31 | 19.4 | 22.6 | 38.7 | 9.7 | 9.7 |
|  | Two or More Races | 494 | 25.1 | 11.1 | 30.8 | 19.0 | 14.0 | 508 | 31.3 | 16.3 | 40.2 | 8.7 | 3.5 |
|  | White | 369 | 8.7 | 10.8 | 27.6 | 21.7 | 31.2 | 381 | 15.7 | 16.5 | 47.0 | 9.7 | 11.0 |
|  | Other/Unknown | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |
| Other | Gifted | 9 | 0.0 | 11.1 | 33.3 | 22.2 | 33.3 | 9 | 11.1 | 11.1 | 33.3 | 33.3 | 11.1 |
|  | IEP | 589 | 11.7 | 17.0 | 40.4 | 16.1 | 14.8 | 591 | 23.7 | 22.0 | 47.5 | 5.8 | 1.0 |
|  | Migrant | 10 | 40.0 | 0.0 | 20.0 | 10.0 | 30.0 | 11 | 36.4 | 0.0 | 36.4 | 18.2 | 9.1 |
| Primary Disability | Autism | 21 | 23.8 | 19.0 | 42.9 | 4.8 | 9.5 | 19 | 36.8 | 10.5 | 47.4 | 5.3 | 0.0 |
|  | Developmental delay | 3 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 | 3 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 6 | 50.0 | 16.7 | 16.7 | 16.7 | 0.0 | 6 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 |
|  | Hearing Impaired | 3 | 0.0 | 0.0 | 33.3 | 0.0 | 66.7 | 5 | 40.0 | 0.0 | 20.0 | 40.0 | 0.0 |
|  | Intellectual Disability | 43 | 27.9 | 23.3 | 46.5 | 2.3 | 0.0 | 43 | 60.5 | 20.9 | 16.3 | 2.3 | 0.0 |
|  | Multiple disabilities | 13 | 69.2 | 23.1 | 7.7 | 0.0 | 0.0 | 13 | 76.9 | 23.1 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 3 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 | 4 | 25.0 | 0.0 | 75.0 | 0.0 | 0.0 |
|  | Other health impairment | 98 | 11.2 | 13.3 | 40.8 | 18.4 | 16.3 | 93 | 23.7 | 25.8 | 46.2 | 3.2 | 1.1 |
|  | Specific learning disability | 376 | 5.6 | 17.0 | 41.8 | 18.6 | 17.0 | 380 | 15.8 | 22.4 | 53.7 | 7.1 | 1.1 |
|  | Speech or language impairment | 11 | 9.1 | 18.2 | 45.5 | 9.1 | 18.2 | 13 | 15.4 | 23.1 | 53.8 | 0.0 | 7.7 |
|  | Traumatic brain injury | 6 | 33.3 | 16.7 | 33.3 | 16.7 | 0.0 | 7 | 28.6 | 28.6 | 42.9 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 66.7 | 0.0 | 0.0 | 0.0 | 33.3 | 3 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.9: Summative Performance Level by Domain - Grade 8

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,349 | 13.9 | 9.2 | 27.7 | 24.7 | 24.5 | 3,267 | 26.8 | 19.3 | 39.9 | 8.4 | 5.6 |
| Gender | Female | 1,417 | 13.1 | 9.7 | 27.6 | 24.6 | 24.9 | 1,391 | 25.6 | 19.1 | 40.8 | 8.2 | 6.3 |
|  | Male | 1,899 | 14.3 | 8.7 | 27.8 | 24.9 | 24.3 | 1,843 | 27.3 | 19.5 | 39.4 | 8.7 | 5.0 |
|  | Missing | 33 | 18.2 | 15.2 | 33.3 | 15.2 | 18.2 | 33 | 45.5 | 12.1 | 33.3 | 3.0 | 6.1 |
| Ethnicity | American Indian or Alaskan Native | 6 | 16.7 | 0.0 | 16.7 | 16.7 | 50.0 | 6 | 16.7 | 0.0 | 83.3 | 0.0 | 0.0 |
|  | Asian | 493 | 6.7 | 7.7 | 30.2 | 23.7 | 31.6 | 486 | 19.5 | 18.3 | 43.2 | 11.3 | 7.6 |
|  | Black or African American | 662 | 11.5 | 9.8 | 29.5 | 24.9 | 24.3 | 659 | 26.9 | 18.8 | 39.3 | 10.0 | 5.0 |
|  | Hispanic or Latino | 1,196 | 16.5 | 9.5 | 26.3 | 24.9 | 22.7 | 1,151 | 28.8 | 19.8 | 39.7 | 6.3 | 5.4 |
|  | Native Hawaiian or Other Pacific Islander | 25 | 4.0 | 12.0 | 44.0 | 20.0 | 20.0 | 24 | 20.8 | 25.0 | 41.7 | 8.3 | 4.2 |
|  | Two or More Races | 559 | 20.4 | 10.0 | 23.4 | 23.4 | 22.7 | 549 | 34.2 | 16.9 | 35.0 | 8.9 | 4.9 |
|  | White | 402 | 10.0 | 7.5 | 31.3 | 27.4 | 23.9 | 386 | 18.7 | 23.1 | 44.6 | 8.0 | 5.7 |
|  | Other/Unknown | 6 | 33.3 | 33.3 | 16.7 | 0.0 | 16.7 | 6 | 66.7 | 16.7 | 0.0 | 16.7 | 0.0 |
| Other | Gifted | 6 | 0.0 | 16.7 | 16.7 | 33.3 | 33.3 | 6 | 33.3 | 0.0 | 33.3 | 16.7 | 16.7 |
|  | IEP | 595 | 11.3 | 10.9 | 39.0 | 24.0 | 14.8 | 541 | 29.6 | 29.6 | 34.0 | 3.9 | 3.0 |
|  | Migrant | 16 | 25.0 | 12.5 | 31.3 | 18.8 | 12.5 | 16 | 31.3 | 31.3 | 31.3 | 0.0 | 6.3 |
| Primary Disability | Autism | 32 | 31.3 | 15.6 | 34.4 | 9.4 | 9.4 | 26 | 42.3 | 23.1 | 19.2 | 15.4 | 0.0 |
|  | Developmental delay | 6 | 33.3 | 50.0 | 0.0 | 16.7 | 0.0 | 4 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 13 | 0.0 | 23.1 | 38.5 | 30.8 | 7.7 | 13 | 30.8 | 23.1 | 46.2 | 0.0 | 0.0 |
|  | Hearing Impaired | 3 | 33.3 | 0.0 | 0.0 | 66.7 | 0.0 | 6 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
|  | Intellectual Disability | 53 | 26.4 | 32.1 | 34.0 | 3.8 | 3.8 | 34 | 70.6 | 14.7 | 14.7 | 0.0 | 0.0 |
|  | Multiple disabilities | 24 | 83.3 | 4.2 | 12.5 | 0.0 | 0.0 | 12 | 91.7 | 8.3 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 4 | 0.0 | 0.0 | 75.0 | 0.0 | 25.0 | 4 | 25.0 | 25.0 | 50.0 | 0.0 | 0.0 |
|  | Other health impairment | 73 | 9.6 | 9.6 | 34.2 | 30.1 | 16.4 | 70 | 27.1 | 31.4 | 34.3 | 2.9 | 4.3 |
|  | Specific learning disability | 377 | 3.4 | 7.4 | 43.2 | 27.9 | 18.0 | 363 | 22.6 | 32.8 | 37.2 | 4.1 | 3.3 |
|  | Speech or language impairment | 5 | 0.0 | 0.0 | 40.0 | 40.0 | 20.0 | 5 | 0.0 | 40.0 | 40.0 | 0.0 | 20.0 |
|  | Traumatic brain injury | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Visual impairment | 2 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.9: Summative Performance Level by Domain - Grade 8 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,222 | 14.9 | 10.0 | 27.2 | 18.9 | 29.1 | 3,254 | 22.5 | 16.3 | 42.8 | 10.0 | 8.4 |
| Gender | Female | 1,357 | 14.5 | 9.5 | 24.5 | 18.6 | 32.9 | 1,386 | 22.1 | 16.2 | 40.3 | 11.5 | 10.0 |
|  | Male | 1,833 | 15.1 | 10.4 | 28.8 | 19.1 | 26.6 | 1,836 | 22.9 | 16.2 | 45.0 | 8.8 | 7.1 |
|  | Missing | 32 | 15.6 | 6.3 | 50.0 | 12.5 | 15.6 | 32 | 21.9 | 34.4 | 28.1 | 6.3 | 9.4 |
| Ethnicity | American Indian or Alaskan Native | 6 | 16.7 | 0.0 | 33.3 | 0.0 | 50.0 | 6 | 16.7 | 0.0 | 83.3 | 0.0 | 0.0 |
|  | Asian | 479 | 9.0 | 9.4 | 25.7 | 20.3 | 35.7 | 481 | 16.8 | 18.9 | 43.2 | 11.2 | 9.8 |
|  | Black or African American | 632 | 11.4 | 12.7 | 28.6 | 18.8 | 28.5 | 648 | 20.4 | 18.1 | 43.5 | 8.6 | 9.4 |
|  | Hispanic or Latino | 1,149 | 17.6 | 9.3 | 28.2 | 17.5 | 27.4 | 1,154 | 25.8 | 14.7 | 41.1 | 10.1 | 8.2 |
|  | Native Hawaiian or Other Pacific Islander | 24 | 16.7 | 8.3 | 29.2 | 37.5 | 8.3 | 25 | 24.0 | 12.0 | 56.0 | 4.0 | 4.0 |
|  | Two or More Races | 542 | 22.1 | 10.3 | 23.8 | 18.1 | 25.6 | 547 | 29.6 | 15.5 | 38.2 | 10.2 | 6.4 |
|  | White | 384 | 9.1 | 8.1 | 27.9 | 21.9 | 33.1 | 387 | 12.7 | 16.8 | 51.9 | 10.1 | 8.5 |
|  | Other/Unknown | 6 | 33.3 | 0.0 | 33.3 | 0.0 | 33.3 | 6 | 66.7 | 16.7 | 0.0 | 16.7 | 0.0 |
| Other | Gifted | 7 | 0.0 | 0.0 | 42.9 | 0.0 | 57.1 | 6 | 16.7 | 16.7 | 50.0 | 0.0 | 16.7 |
|  | IEP | 544 | 10.8 | 15.3 | 37.1 | 18.6 | 18.2 | 538 | 21.0 | 25.7 | 43.9 | 6.5 | 3.0 |
|  | Migrant | 12 | 25.0 | 8.3 | 41.7 | 8.3 | 16.7 | 16 | 43.8 | 6.3 | 37.5 | 12.5 | 0.0 |
| Primary Disability | Autism | 26 | 26.9 | 7.7 | 38.5 | 11.5 | 15.4 | 23 | 34.8 | 17.4 | 39.1 | 4.3 | 4.3 |
|  | Developmental delay | 5 | 40.0 | 60.0 | 0.0 | 0.0 | 0.0 | 4 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 13 | 7.7 | 23.1 | 38.5 | 7.7 | 23.1 | 13 | 30.8 | 30.8 | 23.1 | 15.4 | 0.0 |
|  | Hearing Impaired | 3 | 0.0 | 33.3 | 33.3 | 0.0 | 33.3 | 5 | 60.0 | 0.0 | 20.0 | 20.0 | 0.0 |
|  | Intellectual Disability | 44 | 31.8 | 36.4 | 29.5 | 0.0 | 2.3 | 37 | 62.2 | 24.3 | 13.5 | 0.0 | 0.0 |
|  | Multiple disabilities | 11 | 63.6 | 18.2 | 18.2 | 0.0 | 0.0 | 11 | 81.8 | 18.2 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 4 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 3 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 |
|  | Other health impairment | 70 | 12.9 | 10.0 | 34.3 | 17.1 | 25.7 | 70 | 18.6 | 21.4 | 47.1 | 7.1 | 5.7 |
|  | Specific learning disability | 362 | 5.8 | 13.3 | 38.7 | 22.7 | 19.6 | 367 | 14.2 | 26.7 | 49.0 | 7.1 | 3.0 |
|  | Speech or language impairment | 4 | 0.0 | 0.0 | 75.0 | 0.0 | 25.0 | 3 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 |
|  | Traumatic brain injury | 0 |  |  |  |  |  | 0 |  |  |  |  |  |
|  | Visual impairment | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.10: Summative Performance Level by Domain - Grade 9

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 4,157 | 23.5 | 12.5 | 33.4 | 17.9 | 12.7 | 4,149 | 35.9 | 24.1 | 33.4 | 4.0 | 2.7 |
| Gender | Female | 1,761 | 22.8 | 11.6 | 35.0 | 17.2 | 13.3 | 1,754 | 33.8 | 25.0 | 34.9 | 3.5 | 2.8 |
|  | Male | 2,364 | 23.9 | 13.1 | 32.3 | 18.6 | 12.1 | 2,360 | 37.5 | 23.6 | 32.2 | 4.2 | 2.5 |
|  | Missing | 32 | 31.3 | 9.4 | 21.9 | 12.5 | 25.0 | 35 | 37.1 | 11.4 | 37.1 | 8.6 | 5.7 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 | 3 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 |
|  | Asian | 551 | 7.1 | 10.2 | 37.4 | 23.6 | 21.8 | 551 | 17.8 | 24.9 | 44.5 | 6.5 | 6.4 |
|  | Black or African American | 982 | 19.5 | 15.0 | 35.6 | 17.7 | 12.2 | 990 | 33.5 | 26.3 | 33.5 | 4.2 | 2.4 |
|  | Hispanic or Latino | 1,346 | 29.6 | 11.5 | 31.6 | 16.8 | 10.5 | 1,333 | 42.1 | 23.0 | 30.5 | 2.6 | 1.7 |
|  | Native Hawaiian or Other Pacific Islander | 21 | 9.5 | 14.3 | 42.9 | 23.8 | 9.5 | 20 | 25.0 | 35.0 | 40.0 | 0.0 | 0.0 |
|  | Two or More Races | 797 | 34.6 | 12.8 | 28.4 | 14.8 | 9.4 | 803 | 45.6 | 23.2 | 26.7 | 2.7 | 1.9 |
|  | White | 443 | 15.1 | 12.0 | 36.8 | 20.1 | 16.0 | 435 | 28.3 | 22.5 | 39.8 | 6.4 | 3.0 |
|  | Other/Unknown | 14 | 21.4 | 7.1 | 35.7 | 28.6 | 7.1 | 14 | 28.6 | 21.4 | 35.7 | 14.3 | 0.0 |
| Other | Gifted | 7 | 0.0 | 28.6 | 28.6 | 0.0 | 42.9 | 7 | 14.3 | 28.6 | 14.3 | 42.9 | 0.0 |
|  | IEP | 587 | 15.0 | 18.1 | 46.0 | 14.5 | 6.5 | 560 | 38.0 | 31.8 | 27.9 | 1.8 | 0.5 |
|  | Migrant | 14 | 35.7 | 7.1 | 28.6 | 7.1 | 21.4 | 14 | 50.0 | 7.1 | 28.6 | 0.0 | 14.3 |
| Primary Disability | Autism | 26 | 38.5 | 15.4 | 34.6 | 11.5 | 0.0 | 21 | 57.1 | 19.0 | 19.0 | 4.8 | 0.0 |
|  | Deaf-blindness | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 3 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Developmental delay | 9 | 44.4 | 33.3 | 11.1 | 11.1 | 0.0 | 7 | 71.4 | 28.6 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 8 | 12.5 | 37.5 | 37.5 | 0.0 | 12.5 | 8 | 62.5 | 25.0 | 12.5 | 0.0 | 0.0 |
|  | Hearing Impaired | 8 | 12.5 | 0.0 | 50.0 | 12.5 | 25.0 | 14 | 28.6 | 35.7 | 35.7 | 0.0 | 0.0 |
|  | Intellectual Disability | 49 | 28.6 | 34.7 | 34.7 | 2.0 | 0.0 | 44 | 75.0 | 20.5 | 4.5 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Multiple disabilities | 20 | 85.0 | 5.0 | 10.0 | 0.0 | 0.0 | 6 | 66.7 | 16.7 | 16.7 | 0.0 | 0.0 |
|  | Orthopedic impairment | 4 | 0.0 | 50.0 | 25.0 | 0.0 | 25.0 | 4 | 50.0 | 25.0 | 25.0 | 0.0 | 0.0 |
|  | Other health impairment | 92 | 12.0 | 13.0 | 48.9 | 16.3 | 9.8 | 90 | 40.0 | 30.0 | 25.6 | 3.3 | 1.1 |
|  | Specific learning disability | 356 | 6.2 | 17.1 | 52.8 | 17.7 | 6.2 | 352 | 28.7 | 35.8 | 33.5 | 1.4 | 0.6 |
|  | Speech or language impairment | 9 | 0.0 | 11.1 | 44.4 | 22.2 | 22.2 | 9 | 11.1 | 33.3 | 44.4 | 11.1 | 0.0 |
|  | Traumatic brain injury | 4 | 50.0 | 25.0 | 25.0 | 0.0 | 0.0 | 4 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 33.3 | 33.3 | 0.0 | 0.0 | 33.3 | 3 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.10: Summative Performance Level by Domain - Grade 9 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 4,095 | 20.1 | 16.3 | 32.6 | 15.4 | 15.6 | 4,110 | 32.5 | 20.5 | 39.5 | 5.3 | 2.2 |
| Gender | Female | 1,735 | 18.4 | 16.3 | 31.5 | 16.9 | 16.9 | 1,743 | 30.8 | 19.4 | 41.5 | 5.7 | 2.6 |
|  | Male | 2,328 | 21.3 | 16.4 | 33.6 | 14.2 | 14.5 | 2,335 | 33.7 | 21.6 | 37.9 | 5.0 | 1.9 |
|  | Missing | 32 | 25.0 | 6.3 | 21.9 | 21.9 | 25.0 | 32 | 37.5 | 0.0 | 46.9 | 9.4 | 6.3 |
| Ethnicity | American Indian or Alaskan Native | 4 | 0.0 | 0.0 | 75.0 | 25.0 | 0.0 | 3 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 |
|  | Asian | 539 | 8.0 | 11.3 | 34.5 | 18.7 | 27.5 | 542 | 16.4 | 23.2 | 47.0 | 8.9 | 4.4 |
|  | Black or African American | 970 | 14.0 | 19.8 | 35.5 | 17.4 | 13.3 | 974 | 29.8 | 21.9 | 41.2 | 5.0 | 2.2 |
|  | Hispanic or Latino | 1,305 | 26.0 | 16.1 | 31.1 | 13.4 | 13.4 | 1,326 | 37.1 | 19.3 | 37.6 | 4.3 | 1.7 |
|  | Native Hawaiian or Other Pacific Islander | 19 | 15.8 | 15.8 | 26.3 | 26.3 | 15.8 | 19 | 21.1 | 26.3 | 47.4 | 5.3 | 0.0 |
|  | Two or More Races | 805 | 31.4 | 16.4 | 29.9 | 11.8 | 10.4 | 799 | 43.8 | 18.6 | 32.5 | 3.4 | 1.6 |
|  | White | 439 | 11.2 | 15.0 | 33.7 | 18.5 | 21.6 | 434 | 24.4 | 20.5 | 44.2 | 8.3 | 2.5 |
|  | Other/Unknown | 14 | 7.1 | 14.3 | 28.6 | 21.4 | 28.6 | 13 | 30.8 | 15.4 | 46.2 | 7.7 | 0.0 |
| Other | Gifted | 6 | 0.0 | 16.7 | 50.0 | 0.0 | 33.3 | 7 | 0.0 | 42.9 | 57.1 | 0.0 | 0.0 |
|  | IEP | 561 | 13.2 | 18.5 | 46.5 | 13.5 | 8.2 | 548 | 25.0 | 32.1 | 39.2 | 2.7 | 0.9 |
|  | Migrant | 13 | 38.5 | 0.0 | 23.1 | 23.1 | 15.4 | 13 | 30.8 | 23.1 | 30.8 | 0.0 | 15.4 |
| Primary Disability | Autism | 20 | 30.0 | 15.0 | 35.0 | 15.0 | 5.0 | 19 | 52.6 | 26.3 | 21.1 | 0.0 | 0.0 |
|  | Deaf-blindness | 3 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 3 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 |
|  | Developmental delay | 9 | 44.4 | 22.2 | 22.2 | 11.1 | 0.0 | 6 | 50.0 | 16.7 | 33.3 | 0.0 | 0.0 |
|  | Emotional disturbance | 6 | 50.0 | 33.3 | 16.7 | 0.0 | 0.0 | 8 | 50.0 | 25.0 | 25.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 8 | 12.5 | 0.0 | 37.5 | 12.5 | 37.5 | 10 | 30.0 | 30.0 | 40.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 48 | 29.2 | 33.3 | 33.3 | 4.2 | 0.0 | 46 | 50.0 | 34.8 | 15.2 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Multiple disabilities | 8 | 62.5 | 0.0 | 25.0 | 0.0 | 12.5 | 5 | 60.0 | 0.0 | 40.0 | 0.0 | 0.0 |
|  | Orthopedic impairment | 4 | 0.0 | 75.0 | 0.0 | 0.0 | 25.0 | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 |
|  | Other health impairment | 90 | 12.2 | 12.2 | 50.0 | 14.4 | 11.1 | 89 | 21.3 | 34.8 | 36.0 | 3.4 | 4.5 |
|  | Specific learning disability | 354 | 6.5 | 18.1 | 51.7 | 15.5 | 8.2 | 349 | 17.2 | 33.2 | 45.8 | 3.4 | 0.3 |
|  | Speech or language impairment | 9 | 0.0 | 11.1 | 55.6 | 22.2 | 11.1 | 9 | 22.2 | 11.1 | 66.7 | 0.0 | 0.0 |
|  | Traumatic brain injury | 4 | 25.0 | 50.0 | 25.0 | 0.0 | 0.0 | 4 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 33.3 | 33.3 | 0.0 | 0.0 | 33.3 | 3 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.11: Summative Performance Level by Domain - Grade 10

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,573 | 15.6 | 13.2 | 33.2 | 20.0 | 18.0 | 3,531 | 28.2 | 22.7 | 38.1 | 6.5 | 4.6 |
| Gender | Female | 1,551 | 13.7 | 13.7 | 33.3 | 20.7 | 18.6 | 1,532 | 27.0 | 22.7 | 39.2 | 6.5 | 4.8 |
|  | Male | 2,005 | 17.2 | 12.8 | 33.2 | 19.2 | 17.7 | 1,982 | 29.2 | 22.7 | 37.1 | 6.6 | 4.4 |
|  | Missing | 17 | 11.8 | 5.9 | 23.5 | 47.1 | 11.8 | 17 | 17.6 | 23.5 | 52.9 | 5.9 | 0.0 |
| Ethnicity | American Indian or Alaskan Native | 11 | 18.2 | 18.2 | 45.5 | 0.0 | 18.2 | 10 | 40.0 | 30.0 | 30.0 | 0.0 | 0.0 |
|  | Asian | 552 | 6.9 | 9.6 | 35.9 | 22.3 | 25.4 | 549 | 14.6 | 23.1 | 46.4 | 8.7 | 7.1 |
|  | Black or African American | 822 | 12.2 | 13.6 | 36.9 | 20.1 | 17.3 | 825 | 28.6 | 25.3 | 35.6 | 6.8 | 3.6 |
|  | Hispanic or Latino | 1,204 | 23.3 | 13.4 | 29.5 | 19.7 | 14.1 | 1,189 | 35.2 | 20.4 | 36.5 | 4.8 | 3.2 |
|  | Native Hawaiian or Other Pacific Islander | 23 | 17.4 | 17.4 | 30.4 | 17.4 | 17.4 | 22 | 22.7 | 27.3 | 36.4 | 9.1 | 4.5 |
|  | Two or More Races | 568 | 17.1 | 14.3 | 34.0 | 17.3 | 17.4 | 558 | 29.4 | 24.9 | 35.8 | 5.2 | 4.7 |
|  | White | 387 | 9.0 | 14.7 | 31.5 | 22.2 | 22.5 | 373 | 23.3 | 19.0 | 40.2 | 10.2 | 7.2 |
|  | Other/Unknown | 6 | 33.3 | 0.0 | 50.0 | 16.7 | 0.0 | 5 | 20.0 | 80.0 | 0.0 | 0.0 | 0.0 |
| Other | Gifted | 5 | 0.0 | 0.0 | 20.0 | 40.0 | 40.0 | 5 | 20.0 | 0.0 | 40.0 | 20.0 | 20.0 |
|  | IEP | 501 | 14.0 | 14.6 | 42.5 | 19.6 | 9.4 | 458 | 27.5 | 31.4 | 36.9 | 3.9 | 0.2 |
|  | Migrant | 19 | 21.1 | 26.3 | 47.4 | 5.3 | 0.0 | 19 | 42.1 | 31.6 | 26.3 | 0.0 | 0.0 |
| Primary Disability | Autism | 29 | 44.8 | 0.0 | 27.6 | 17.2 | 10.3 | 19 | 31.6 | 15.8 | 42.1 | 10.5 | 0.0 |
|  | Developmental delay | 5 | 40.0 | 20.0 | 40.0 | 0.0 | 0.0 | 5 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 8 | 0.0 | 0.0 | 50.0 | 37.5 | 12.5 | 8 | 12.5 | 12.5 | 62.5 | 12.5 | 0.0 |
|  | Hearing Impaired | 5 | 40.0 | 20.0 | 20.0 | 20.0 | 0.0 | 6 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 |
|  | Intellectual Disability | 39 | 28.2 | 28.2 | 41.0 | 2.6 | 0.0 | 34 | 58.8 | 26.5 | 14.7 | 0.0 | 0.0 |
|  | Multiple disabilities | 23 | 73.9 | 17.4 | 8.7 | 0.0 | 0.0 | 7 | 85.7 | 0.0 | 14.3 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |  |  |  |  |  |
|  | Other health impairment | 59 | 11.9 | 23.7 | 42.4 | 18.6 | 3.4 | 59 | 35.6 | 33.9 | 30.5 | 0.0 | 0.0 |
|  | Specific learning disability | 307 | 4.2 | 13.0 | 45.9 | 23.8 | 13.0 | 297 | 19.9 | 33.7 | 41.4 | 4.7 | 0.3 |
|  | Speech or language impairment | 8 | 0.0 | 0.0 | 62.5 | 25.0 | 12.5 | 8 | 0.0 | 37.5 | 62.5 | 0.0 | 0.0 |
|  | Traumatic brain injury | 5 | 40.0 | 20.0 | 40.0 | 0.0 | 0.0 | 5 | 80.0 | 20.0 | 0.0 | 0.0 | 0.0 |
|  | Visual impairment | 5 | 40.0 | 0.0 | 20.0 | 20.0 | 20.0 | 3 | 33.3 | 0.0 | 33.3 | 33.3 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.11: Summative Performance Level by Domain - Grade 10 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 3,475 | 12.1 | 16.8 | 34.1 | 15.5 | 21.4 | 3,516 | 25.3 | 20.7 | 42.0 | 7.4 | 4.6 |
| Gender | Female | 1,502 | 10.9 | 16.3 | 35.6 | 15.8 | 21.4 | 1,532 | 23.7 | 19.9 | 43.1 | 8.2 | 5.2 |
|  | Male | 1,956 | 13.0 | 17.3 | 33.0 | 15.1 | 21.5 | 1,967 | 26.6 | 21.4 | 41.1 | 6.8 | 4.2 |
|  | Missing | 17 | 17.6 | 0.0 | 29.4 | 35.3 | 17.6 | 17 | 17.6 | 11.8 | 47.1 | 17.6 | 5.9 |
| Ethnicity | American Indian or Alaskan Native | 11 | 18.2 | 36.4 | 18.2 | 9.1 | 18.2 | 10 | 40.0 | 10.0 | 40.0 | 10.0 | 0.0 |
|  | Asian | 544 | 5.5 | 11.6 | 36.0 | 15.3 | 31.6 | 549 | 13.5 | 23.3 | 48.8 | 9.1 | 5.3 |
|  | Black or African American | 811 | 9.6 | 17.8 | 36.3 | 17.0 | 19.4 | 824 | 23.1 | 22.1 | 43.6 | 7.3 | 4.0 |
|  | Hispanic or Latino | 1,163 | 17.5 | 18.6 | 32.5 | 14.2 | 17.2 | 1,177 | 33.1 | 17.7 | 40.0 | 5.6 | 3.7 |
|  | Native Hawaiian or Other Pacific Islander | 22 | 9.1 | 13.6 | 36.4 | 9.1 | 31.8 | 22 | 18.2 | 27.3 | 31.8 | 13.6 | 9.1 |
|  | Two or More Races | 555 | 14.2 | 17.1 | 34.1 | 15.1 | 19.5 | 559 | 28.4 | 22.4 | 37.0 | 7.0 | 5.2 |
|  | White | 364 | 6.6 | 16.2 | 31.6 | 18.4 | 27.2 | 369 | 18.4 | 20.6 | 42.3 | 11.4 | 7.3 |
|  | Other/Unknown | 5 | 40.0 | 0.0 | 60.0 | 0.0 | 0.0 | 6 | 16.7 | 16.7 | 66.7 | 0.0 | 0.0 |
| Other | Gifted | 5 | 0.0 | 20.0 | 20.0 | 40.0 | 20.0 | 5 | 0.0 | 20.0 | 40.0 | 0.0 | 40.0 |
|  | IEP | 464 | 10.6 | 17.5 | 42.5 | 16.2 | 13.4 | 451 | 21.5 | 25.9 | 47.0 | 4.2 | 1.3 |
|  | Migrant | 18 | 11.1 | 33.3 | 44.4 | 5.6 | 5.6 | 18 | 50.0 | 22.2 | 27.8 | 0.0 | 0.0 |
| Primary Disability | Autism | 19 | 21.1 | 10.5 | 31.6 | 26.3 | 10.5 | 18 | 22.2 | 22.2 | 33.3 | 16.7 | 5.6 |
|  | Developmental delay | 7 | 28.6 | 42.9 | 28.6 | 0.0 | 0.0 | 5 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 9 | 0.0 | 0.0 | 44.4 | 33.3 | 22.2 | 8 | 0.0 | 25.0 | 62.5 | 12.5 | 0.0 |
|  | Hearing Impaired | 5 | 40.0 | 0.0 | 40.0 | 0.0 | 20.0 | 6 | 50.0 | 16.7 | 33.3 | 0.0 | 0.0 |
|  | Intellectual Disability | 39 | 38.5 | 25.6 | 30.8 | 5.1 | 0.0 | 33 | 42.4 | 36.4 | 21.2 | 0.0 | 0.0 |
|  | Multiple disabilities | 7 | 42.9 | 42.9 | 14.3 | 0.0 | 0.0 | 7 | 85.7 | 14.3 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |  |  |  |  |  |
|  | Other health impairment | 57 | 12.3 | 28.1 | 45.6 | 7.0 | 7.0 | 56 | 28.6 | 33.9 | 35.7 | 1.8 | 0.0 |
|  | Specific learning disability | 298 | 4.0 | 14.4 | 45.0 | 19.8 | 16.8 | 295 | 14.9 | 24.4 | 54.6 | 4.7 | 1.4 |
|  | Speech or language impairment | 8 | 12.5 | 12.5 | 50.0 | 25.0 | 0.0 | 8 | 0.0 | 12.5 | 75.0 | 12.5 | 0.0 |
|  | Traumatic brain injury | 5 | 20.0 | 40.0 | 40.0 | 0.0 | 0.0 | 5 | 80.0 | 20.0 | 0.0 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 0.0 | 0.0 | 33.3 | 0.0 | 66.7 | 3 | 0.0 | 33.3 | 33.3 | 0.0 | 33.3 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.12: Summative Performance Level by Domain - Grade 11

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 2,927 | 9.8 | 11.3 | 37.1 | 20.7 | 21.0 | 2,896 | 20.9 | 26.7 | 39.2 | 7.8 | 5.4 |
| Gender | Female | 1,326 | 10.4 | 10.9 | 35.3 | 22.6 | 20.7 | 1,308 | 19.9 | 26.5 | 40.4 | 8.3 | 4.8 |
|  | Male | 1,576 | 9.4 | 11.7 | 38.3 | 19.4 | 21.3 | 1,565 | 21.7 | 26.9 | 38.1 | 7.4 | 5.9 |
|  | Missing | 25 | 8.0 | 12.0 | 56.0 | 4.0 | 20.0 | 23 | 21.7 | 26.1 | 43.5 | 4.3 | 4.3 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 0.0 | 33.3 | 0.0 | 66.7 | 3 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Asian | 533 | 5.3 | 8.3 | 38.6 | 22.1 | 25.7 | 533 | 14.4 | 26.6 | 41.7 | 8.8 | 8.4 |
|  | Black or African American | 763 | 10.2 | 11.0 | 41.7 | 19.5 | 17.6 | 760 | 21.4 | 30.9 | 37.2 | 6.4 | 3.9 |
|  | Hispanic or Latino | 900 | 14.3 | 12.6 | 34.8 | 20.8 | 17.6 | 883 | 25.9 | 26.0 | 37.4 | 6.8 | 3.9 |
|  | Native Hawaiian or Other Pacific Islander | 15 | 6.7 | 13.3 | 46.7 | 20.0 | 13.3 | 15 | 20.0 | 40.0 | 40.0 | 0.0 | 0.0 |
|  | Two or More Races | 341 | 7.9 | 11.4 | 34.6 | 22.0 | 24.0 | 342 | 17.5 | 25.7 | 42.7 | 8.8 | 5.3 |
|  | White | 365 | 6.6 | 13.4 | 32.9 | 20.0 | 27.1 | 355 | 20.0 | 20.3 | 40.0 | 11.3 | 8.5 |
|  | Other/Unknown | 7 | 14.3 | 14.3 | 42.9 | 14.3 | 14.3 | 5 | 20.0 | 20.0 | 60.0 | 0.0 | 0.0 |
| Other | Gifted | 3 | 0.0 | 0.0 | 33.3 | 33.3 | 33.3 | 3 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 |
|  | IEP | 424 | 14.2 | 15.6 | 42.5 | 19.3 | 8.5 | 403 | 29.8 | 32.0 | 33.7 | 3.5 | 1.0 |
|  | Migrant | 33 | 33.3 | 18.2 | 30.3 | 6.1 | 12.1 | 32 | 43.8 | 34.4 | 12.5 | 6.3 | 3.1 |
| Primary Disability | Autism | 13 | 23.1 | 30.8 | 38.5 | 7.7 | 0.0 | 9 | 44.4 | 22.2 | 33.3 | 0.0 | 0.0 |
|  | Developmental delay | 7 | 57.1 | 14.3 | 28.6 | 0.0 | 0.0 | 7 | 71.4 | 28.6 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 14 | 0.0 | 14.3 | 78.6 | 7.1 | 0.0 | 14 | 35.7 | 50.0 | 14.3 | 0.0 | 0.0 |
|  | Hearing Impaired | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 6 | 83.3 | 0.0 | 16.7 | 0.0 | 0.0 |
|  | Intellectual Disability | 41 | 31.7 | 24.4 | 34.1 | 9.8 | 0.0 | 35 | 51.4 | 34.3 | 14.3 | 0.0 | 0.0 |
|  | Multiple disabilities | 19 | 73.7 | 21.1 | 5.3 | 0.0 | 0.0 | 9 | 88.9 | 11.1 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 51 | 7.8 | 13.7 | 49.0 | 21.6 | 7.8 | 50 | 26.0 | 24.0 | 46.0 | 4.0 | 0.0 |
|  | Specific learning disability | 266 | 8.3 | 12.8 | 44.0 | 23.3 | 11.7 | 263 | 22.8 | 33.8 | 37.6 | 4.6 | 1.1 |
|  | Speech or language impairment | 3 | 0.0 | 0.0 | 33.3 | 33.3 | 33.3 | 3 | 0.0 | 33.3 | 33.3 | 0.0 | 33.3 |
|  | Traumatic brain injury | 3 | 0.0 | 33.3 | 33.3 | 33.3 | 0.0 | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 |
|  | Visual impairment | 4 | 25.0 | 25.0 | 50.0 | 0.0 | 0.0 | 2 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.12: Summative Performance Level by Domain - Grade 11 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 2,832 | 8.0 | 14.0 | 34.2 | 18.6 | 25.2 | 2,880 | 18.0 | 22.0 | 45.8 | 8.1 | 6.0 |
| Gender | Female | 1,276 | 8.1 | 13.6 | 32.8 | 19.7 | 25.9 | 1,302 | 17.9 | 20.3 | 48.2 | 7.2 | 6.4 |
|  | Male | 1,535 | 7.9 | 14.3 | 35.0 | 18.0 | 24.7 | 1,556 | 18.3 | 23.4 | 43.6 | 9.0 | 5.8 |
|  | Missing | 21 | 4.8 | 9.5 | 61.9 | 4.8 | 19.0 | 22 | 4.5 | 31.8 | 59.1 | 0.0 | 4.5 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 33.3 | 0.0 | 0.0 | 66.7 | 3 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 |
|  | Asian | 528 | 3.8 | 11.7 | 34.1 | 18.2 | 32.2 | 534 | 11.2 | 26.2 | 45.1 | 8.8 | 8.6 |
|  | Black or African American | 750 | 7.3 | 16.3 | 37.7 | 17.9 | 20.8 | 751 | 18.4 | 24.5 | 45.4 | 5.7 | 6.0 |
|  | Hispanic or Latino | 849 | 13.5 | 13.4 | 33.5 | 19.0 | 20.6 | 881 | 24.0 | 19.4 | 44.8 | 8.1 | 3.7 |
|  | Native Hawaiian or Other Pacific Islander | 16 | 0.0 | 12.5 | 37.5 | 31.3 | 18.8 | 15 | 13.3 | 33.3 | 46.7 | 6.7 | 0.0 |
|  | Two or More Races | 335 | 6.9 | 13.4 | 35.8 | 16.7 | 27.2 | 340 | 15.0 | 20.0 | 48.2 | 10.6 | 6.2 |
|  | White | 346 | 3.8 | 13.9 | 27.2 | 21.7 | 33.5 | 351 | 15.7 | 18.5 | 47.9 | 9.7 | 8.3 |
|  | Other/Unknown | 5 | 0.0 | 40.0 | 40.0 | 20.0 | 0.0 | 5 | 20.0 | 40.0 | 20.0 | 20.0 | 0.0 |
| Other | Gifted | 3 | 0.0 | 0.0 | 0.0 | 33.3 | 66.7 | 3 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 |
|  | IEP | 405 | 12.1 | 16.5 | 38.3 | 18.5 | 14.6 | 398 | 23.4 | 24.9 | 45.0 | 4.8 | 2.0 |
|  | Migrant | 32 | 25.0 | 25.0 | 21.9 | 15.6 | 12.5 | 33 | 45.5 | 21.2 | 24.2 | 0.0 | 9.1 |
| Primary Disability | Autism | 11 | 27.3 | 27.3 | 27.3 | 18.2 | 0.0 | 8 | 37.5 | 12.5 | 50.0 | 0.0 | 0.0 |
|  | Developmental delay | 5 | 40.0 | 40.0 | 0.0 | 0.0 | 20.0 | 6 | 66.7 | 16.7 | 16.7 | 0.0 | 0.0 |
|  | Emotional disturbance | 12 | 16.7 | 16.7 | 58.3 | 8.3 | 0.0 | 13 | 38.5 | 46.2 | 15.4 | 0.0 | 0.0 |
|  | Hearing Impaired | 2 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 5 | 60.0 | 20.0 | 20.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 40 | 37.5 | 32.5 | 22.5 | 5.0 | 2.5 | 35 | 51.4 | 25.7 | 22.9 | 0.0 | 0.0 |
|  | Multiple disabilities | 10 | 60.0 | 40.0 | 0.0 | 0.0 | 0.0 | 10 | 90.0 | 10.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 48 | 2.1 | 14.6 | 50.0 | 31.3 | 2.1 | 50 | 22.0 | 22.0 | 52.0 | 4.0 | 0.0 |
|  | Specific learning disability | 266 | 6.8 | 12.4 | 39.5 | 20.7 | 20.7 | 262 | 15.6 | 24.8 | 50.4 | 6.1 | 3.1 |
|  | Speech or language impairment | 3 | 0.0 | 0.0 | 33.3 | 0.0 | 66.7 | 3 | 0.0 | 33.3 | 33.3 | 33.3 | 0.0 |
|  | Traumatic brain injury | 3 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 |
|  | Visual impairment | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 2 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded.

Table S2.13: Summative Performance Level by Domain - Grade 12

| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 2,203 | 8.7 | 10.7 | 35.9 | 21.4 | 23.3 | 2,171 | 20.0 | 25.2 | 39.4 | 9.0 | 6.4 |
| Gender | Female | 1,040 | 8.0 | 11.3 | 35.1 | 22.8 | 22.9 | 1,017 | 20.3 | 25.0 | 40.0 | 9.5 | 5.2 |
|  | Male | 1,150 | 9.2 | 10.3 | 36.8 | 20.2 | 23.5 | 1,141 | 20.0 | 25.5 | 38.7 | 8.5 | 7.3 |
|  | Missing | 13 | 15.4 | 0.0 | 23.1 | 23.1 | 38.5 | 13 | 7.7 | 15.4 | 46.2 | 15.4 | 15.4 |
| Ethnicity | American Indian or Alaskan Native | 5 | 0.0 | 0.0 | 40.0 | 40.0 | 20.0 | 4 | 0.0 | 25.0 | 75.0 | 0.0 | 0.0 |
|  | Asian | 466 | 4.3 | 6.7 | 35.0 | 21.5 | 32.6 | 453 | 11.0 | 20.3 | 45.3 | 12.1 | 11.3 |
|  | Black or African American | 510 | 7.3 | 13.5 | 38.4 | 22.0 | 18.8 | 510 | 23.7 | 29.0 | 35.3 | 8.0 | 3.9 |
|  | Hispanic or Latino | 724 | 14.1 | 11.3 | 34.3 | 21.0 | 19.3 | 711 | 24.3 | 24.5 | 39.5 | 6.8 | 4.9 |
|  | Native Hawaiian or Other Pacific Islander | 9 | 11.1 | 0.0 | 33.3 | 33.3 | 22.2 | 9 | 22.2 | 22.2 | 33.3 | 11.1 | 11.1 |
|  | Two or More Races | 212 | 7.1 | 10.8 | 37.3 | 22.6 | 22.2 | 214 | 16.4 | 30.4 | 39.3 | 9.8 | 4.2 |
|  | White | 274 | 5.8 | 11.3 | 35.8 | 19.7 | 27.4 | 267 | 20.2 | 24.0 | 36.7 | 10.9 | 8.2 |
|  | Other/Unknown | 3 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 | 3 | 0.0 | 33.3 | 33.3 | 33.3 | 0.0 |
| Other | Gifted | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | IEP | 301 | 13.3 | 15.6 | 45.8 | 14.6 | 10.6 | 282 | 34.0 | 29.1 | 33.7 | 2.5 | 0.7 |
|  | Migrant | 20 | 40.0 | 10.0 | 25.0 | 15.0 | 10.0 | 20 | 45.0 | 25.0 | 20.0 | 5.0 | 5.0 |
| Primary Disability | Autism | 11 | 36.4 | 0.0 | 36.4 | 18.2 | 9.1 | 10 | 30.0 | 30.0 | 40.0 | 0.0 | 0.0 |
|  | Developmental delay | 2 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 9 | 22.2 | 11.1 | 33.3 | 11.1 | 22.2 | 9 | 55.6 | 11.1 | 22.2 | 11.1 | 0.0 |
|  | Hearing Impaired | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 40 | 30.0 | 35.0 | 35.0 | 0.0 | 0.0 | 34 | 70.6 | 20.6 | 8.8 | 0.0 | 0.0 |
|  | Multiple disabilities | 15 | 80.0 | 13.3 | 6.7 | 0.0 | 0.0 | 8 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Other health impairment | 28 | 7.1 | 17.9 | 50.0 | 17.9 | 7.1 | 27 | 33.3 | 44.4 | 22.2 | 0.0 | 0.0 |
|  | Specific learning disability | 193 | 4.7 | 12.4 | 51.3 | 18.1 | 13.5 | 187 | 24.6 | 30.5 | 40.6 | 3.2 | 1.1 |
|  | Traumatic brain injury | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 2 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 |

Table S2.13: Summative Performance Level by Domain - Grade 12 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
| Total |  | 2,147 | 6.1 | 12.9 | 33.9 | 19.2 | 27.8 | 2,163 | 16.3 | 22.1 | 45.5 | 9.8 | 6.3 |
| Gender | Female | 1,012 | 5.3 | 14.0 | 32.1 | 19.8 | 28.8 | 1,016 | 15.9 | 21.8 | 45.6 | 9.8 | 6.9 |
|  | Male | 1,123 | 6.8 | 12.1 | 35.8 | 18.9 | 26.4 | 1,137 | 16.7 | 22.4 | 45.6 | 9.7 | 5.6 |
|  | Missing | 12 | 16.7 | 0.0 | 8.3 | 0.0 | 75.0 | 10 | 10.0 | 10.0 | 30.0 | 20.0 | 30.0 |
| Ethnicity | American Indian or Alaskan Native | 4 | 0.0 | 0.0 | 75.0 | 0.0 | 25.0 | 5 | 0.0 | 20.0 | 80.0 | 0.0 | 0.0 |
|  | Asian | 447 | 3.1 | 8.3 | 30.9 | 21.5 | 36.2 | 452 | 9.7 | 17.9 | 50.4 | 12.8 | 9.1 |
|  | Black or African American | 507 | 6.1 | 15.4 | 35.1 | 19.7 | 23.7 | 509 | 17.1 | 25.9 | 43.0 | 9.6 | 4.3 |
|  | Hispanic or Latino | 710 | 9.4 | 15.5 | 35.2 | 17.3 | 22.5 | 710 | 21.8 | 20.8 | 43.7 | 8.2 | 5.5 |
|  | Native Hawaiian or Other Pacific Islander | 9 | 0.0 | 22.2 | 33.3 | 33.3 | 11.1 | 9 | 11.1 | 44.4 | 22.2 | 11.1 | 11.1 |
|  | Two or More Races | 202 | 3.5 | 13.9 | 35.1 | 19.8 | 27.7 | 209 | 14.4 | 23.9 | 45.9 | 8.1 | 7.7 |
|  | White | 265 | 4.9 | 8.3 | 31.7 | 18.9 | 36.2 | 267 | 13.1 | 22.8 | 46.4 | 10.9 | 6.7 |
|  | Other/Unknown | 3 | 0.0 | 33.3 | 33.3 | 0.0 | 33.3 | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |
| Other | Gifted | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | IEP | 278 | 8.6 | 16.5 | 42.8 | 14.7 | 17.3 | 280 | 24.3 | 26.1 | 41.8 | 6.8 | 1.1 |
|  | Migrant | 18 | 16.7 | 22.2 | 50.0 | 5.6 | 5.6 | 20 | 35.0 | 40.0 | 20.0 | 0.0 | 5.0 |
| Primary Disability | Autism | 9 | 22.2 | 11.1 | 33.3 | 33.3 | 0.0 | 9 | 22.2 | 11.1 | 44.4 | 22.2 | 0.0 |
|  | Developmental delay | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 8 | 12.5 | 25.0 | 37.5 | 12.5 | 12.5 | 8 | 37.5 | 25.0 | 37.5 | 0.0 | 0.0 |
|  | Hearing Impaired | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 |
|  | Intellectual Disability | 34 | 29.4 | 35.3 | 29.4 | 2.9 | 2.9 | 33 | 63.6 | 21.2 | 15.2 | 0.0 | 0.0 |
|  | Multiple disabilities | 5 | 80.0 | 20.0 | 0.0 | 0.0 | 0.0 | 7 | 85.7 | 14.3 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 1 | 2 | 3 | 4 | 5 | N | 1 | 2 | 3 | 4 | 5 |
|  | Other health impairment | 28 | 10.7 | 17.9 | 53.6 | 10.7 | 7.1 | 25 | 24.0 | 32.0 | 40.0 | 4.0 | 0.0 |
|  | Specific learning disability | 190 | 2.6 | 12.6 | 45.3 | 17.4 | 22.1 | 191 | 15.2 | 27.7 | 48.2 | 7.3 | 1.6 |
|  | Traumatic brain injury | 3 | 0.0 | 0.0 | 33.3 | 33.3 | 33.3 | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 |

* Domains with Exemption or Not Attempted are excluded


# Section 3: Summative Assessment - Percentage of Students by Overall Proficiency Level 

Table S3.1: Summative Overall Proficiency Levels - Kindergarten

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 10,123 | 14.2 | 77.3 | 8.6 |
| Gender | Female | 4,821 | 11.9 | 79.1 | 8.9 |
|  | Male | 5,110 | 16.2 | 75.7 | 8.1 |
|  | Missing | 192 | 15.6 | 71.4 | 13.0 |
| Ethnicity | American Indian or Alaskan Native | 19 | 15.8 | 78.9 | 5.3 |
|  | Asian | 2,519 | 7.8 | 77.8 | 14.4 |
|  | Black or African American | 1,904 | 12.1 | 80.3 | 7.6 |
|  | Hispanic or Latino | 2,715 | 19.9 | 76.3 | 3.8 |
|  | Native Hawaiian or Other Pacific Islander | 48 | 12.5 | 77.1 | 10.4 |
|  | Two or More Races | 1,269 | 24.0 | 70.2 | 5.8 |
|  | White | 1,618 | 9.4 | 80.0 | 10.6 |
|  | Other/Unknown | 31 | 9.7 | 74.2 | 16.1 |
| Other | Gifted | 2 | 0.0 | 0.0 | 100.0 |
|  | IEP | 516 | 34.7 | 62.0 | 3.3 |
|  | Migrant | 18 | 22.2 | 66.7 | 11.1 |
| Primary Disability | Autism | 124 | 49.2 | 49.2 | 1.6 |
|  | Developmental delay | 9 | 55.6 | 44.4 | 0.0 |
|  | Emotional disturbance | 7 | 0.0 | 71.4 | 28.6 |
|  | Hearing Impaired | 4 | 75.0 | 25.0 | 0.0 |
|  | Intellectual Disability | 25 | 72.0 | 28.0 | 0.0 |
|  | Multiple disabilities | 21 | 90.5 | 9.5 | 0.0 |
|  | Orthopedic impairment | 10 | 20.0 | 80.0 | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
|  | Other health impairment | 41 | 26.8 | 63.4 | 9.8 |
|  | Specific learning disability | 35 | 31.4 | 68.6 | 0.0 |
| Speech or language impairment | 226 | 18.1 | 77.9 | 4.0 |  |
| Traumatic brain injury | 1 | 0.0 | 100.0 | 0.0 |  |
| Visual impairment | 5 | 20.0 | 80.0 | 0.0 |  |

Table S3.2: Summative Overall Proficiency Levels - Grade 1

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 8,802 | 9.3 | 71.0 | 19.7 |
| Gender | Female | 4,170 | 8.1 | 69.8 | 22.1 |
|  | Male | 4,512 | 10.3 | 72.1 | 17.5 |
|  | Missing | 120 | 11.7 | 70.0 | 18.3 |
| Ethnicity | American Indian or Alaskan Native | 29 | 13.8 | 65.5 | 20.7 |
|  | Asian | 2,028 | 5.5 | 63.6 | 30.9 |
|  | Black or African American | 1,610 | 9.4 | 72.3 | 18.3 |
|  | Hispanic or Latino | 2,550 | 10.9 | 77.8 | 11.3 |
|  | Native Hawaiian or Other Pacific Islander | 55 | 9.1 | 63.6 | 27.3 |
|  | Two or More Races | 1,090 | 14.8 | 72.7 | 12.6 |
|  | White | 1,410 | 7.2 | 67.0 | 25.9 |
|  | Other/Unknown | 30 | 10.0 | 73.3 | 16.7 |
| Other | Gifted | 23 | 0.0 | 47.8 | 52.2 |
|  | IEP | 612 | 27.5 | 66.3 | 6.2 |
|  | Migrant | 22 | 27.3 | 59.1 | 13.6 |
| Primary Disability | Autism | 122 | 53.3 | 41.0 | 5.7 |
|  | Developmental delay | 3 | 66.7 | 33.3 | 0.0 |
|  | Emotional disturbance | 14 | 14.3 | 78.6 | 7.1 |
|  | Hearing Impaired | 9 | 44.4 | 55.6 | 0.0 |
|  | Intellectual Disability | 33 | 45.5 | 54.5 | 0.0 |
|  | Multiple disabilities | 27 | 81.5 | 18.5 | 0.0 |
|  | Orthopedic impairment | 13 | 23.1 | 53.8 | 23.1 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
|  | Other health impairment | 68 | 23.5 | 70.6 | 5.9 |
|  | Specific learning disability | 86 | 19.8 | 77.9 | 2.3 |
| Speech or language impairment | 229 | 8.7 | 82.1 | 9.2 |  |
| Traumatic brain injury | 1 | 0.0 | 100.0 | 0.0 |  |
| Visual impairment | 2 | 0.0 | 100.0 | 0.0 |  |

Table S3.3: Summative Overall Proficiency Levels - Grade 2

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 7,322 | 10.0 | 63.8 | 26.1 |
| Gender | Female | 3,346 | 8.4 | 61.4 | 30.2 |
|  | Male | 3,881 | 11.5 | 66.0 | 22.5 |
|  | Missing | 95 | 8.4 | 62.1 | 29.5 |
| Ethnicity | American Indian or Alaskan Native | 17 | 17.6 | 64.7 | 17.6 |
|  | Asian | 1,477 | 6.9 | 58.0 | 35.1 |
|  | Black or African American | 1,415 | 7.9 | 66.2 | 25.9 |
|  | Hispanic or Latino | 2,269 | 12.1 | 67.4 | 20.5 |
|  | Native Hawaiian or Other Pacific Islander | 45 | 6.7 | 68.9 | 24.4 |
|  | Two or More Races | 957 | 16.4 | 64.1 | 19.5 |
|  | White | 1,120 | 7.1 | 61.1 | 31.8 |
|  | Other/Unknown | 22 | 18.2 | 54.5 | 27.3 |
| Other | Gifted | 37 | 0.0 | 37.8 | 62.2 |
|  | Home Schooled | 1 | 100.0 | 0.0 | 0.0 |
|  | IEP | 614 | 26.2 | 68.1 | 5.7 |
|  | Migrant | 20 | 20.0 | 50.0 | 30.0 |
| Primary Disability | Autism | 99 | 45.5 | 49.5 | 5.1 |
|  | Developmental delay | 4 | 75.0 | 25.0 | 0.0 |
|  | Emotional disturbance | 9 | 11.1 | 88.9 | 0.0 |
|  | Hearing Impaired | 9 | 44.4 | 55.6 | 0.0 |
|  | Intellectual Disability | 40 | 52.5 | 47.5 | 0.0 |
|  | Multiple disabilities | 35 | 88.6 | 11.4 | 0.0 |


| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
|  | Orthopedic impairment | 5 | 20.0 | 60.0 | 20.0 |
|  | Other health impairment | 77 | 18.2 | 76.6 | 5.2 |
| Specific learning disability | 187 | 14.4 | 82.9 | 2.7 |  |
| Speech or language impairment | 145 | 10.3 | 76.6 | 13.1 |  |
| Traumatic brain injury | 2 | 0.0 | 50.0 | 50.0 |  |
|  | Visual impairment | 2 | 0.0 | 100.0 | 0.0 |

Table S3.4: Summative Overall Proficiency Levels - Grade 3

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 5,853 | 10.4 | 70.6 | 19.0 |
| Gender | Female | 2,602 | 9.5 | 68.6 | 21.9 |
|  | Male | 3,225 | 10.9 | 72.3 | 16.8 |
|  | Missing | 26 | 19.2 | 69.2 | 11.5 |
| Ethnicity | American Indian or Alaskan Native | 11 | 27.3 | 54.5 | 18.2 |
|  | Asian | 998 | 8.3 | 65.2 | 26.5 |
|  | Black or African American | 1,207 | 8.2 | 75.0 | 16.8 |
|  | Hispanic or Latino | 1,897 | 12.2 | 72.2 | 15.6 |
|  | Native Hawaiian or Other Pacific Islander | 50 | 2.0 | 72.0 | 26.0 |
|  | Two or More Races | 886 | 14.6 | 71.2 | 14.2 |
|  | White | 796 | 7.4 | 66.5 | 26.1 |
|  | Other/Unknown | 8 | 12.5 | 75.0 | 12.5 |
| Other | Gifted | 30 | 0.0 | 56.7 | 43.3 |
|  | IEP | 808 | 17.9 | 76.9 | 5.2 |
|  | Migrant | 30 | 23.3 | 56.7 | 20.0 |
| Primary Disability | Autism | 91 | 46.2 | 51.6 | 2.2 |
|  | Developmental delay | 6 | 50.0 | 50.0 | 0.0 |
|  | Emotional disturbance | 18 | 11.1 | 83.3 | 5.6 |
|  | Hearing Impaired | 9 | 22.2 | 55.6 | 22.2 |
|  | Intellectual Disability | 42 | 33.3 | 66.7 | 0.0 |
|  | Multiple disabilities | 34 | 88.2 | 11.8 | 0.0 |
|  | Orthopedic impairment | 6 | 16.7 | 16.7 | 66.7 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
|  | Other health impairment | 111 | 11.7 | 82.0 | 6.3 |
|  | Specific learning disability | 402 | 10.0 | 86.6 | 3.5 |
|  | Speech or language impairment | 95 | 1.1 | 85.3 | 13.7 |
| Traumatic brain injury | 2 | 50.0 | 0.0 | 50.0 |  |
| Visual impairment | 1 | 0.0 | 100.0 | 0.0 |  |

Table S3.5: Summative Overall Proficiency Levels - Grade 4

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 4,419 | 12.9 | 63.6 | 23.6 |
| Gender | Female | 1,943 | 11.2 | 62.7 | 26.0 |
|  | Male | 2,422 | 14.0 | 64.3 | 21.7 |
|  | Missing | 54 | 22.2 | 61.1 | 16.7 |
| Ethnicity | American Indian or Alaskan Native | 9 | 11.1 | 55.6 | 33.3 |
|  | Asian | 658 | 8.7 | 55.8 | 35.6 |
|  | Black or African American | 848 | 9.8 | 69.3 | 20.9 |
|  | Hispanic or Latino | 1,565 | 14.9 | 63.7 | 21.4 |
|  | Native Hawaiian or Other Pacific Islander | 30 | 10.0 | 66.7 | 23.3 |
|  | Two or More Races | 686 | 18.1 | 62.8 | 19.1 |
|  | White | 615 | 10.7 | 64.6 | 24.7 |
|  | Other/Unknown | 8 | 12.5 | 62.5 | 25.0 |
| Other | Gifted | 21 | 0.0 | 61.9 | 38.1 |
|  | IEP | 826 | 17.3 | 74.7 | 8.0 |
|  | Migrant | 19 | 10.5 | 68.4 | 21.1 |
| Primary Disability | Autism | 87 | 47.1 | 49.4 | 3.4 |
|  | Deaf-blindness | 1 | 100.0 | 0.0 | 0.0 |
|  | Developmental delay | 7 | 71.4 | 28.6 | 0.0 |
|  | Emotional disturbance | 11 | 0.0 | 90.9 | 9.1 |
|  | Hearing Impaired | 8 | 12.5 | 75.0 | 12.5 |
|  | Intellectual Disability | 51 | 56.9 | 43.1 | 0.0 |
|  | Multiple disabilities | 23 | 91.3 | 8.7 | 0.0 |


| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Orthopedic impairment | 5 | 20.0 | 80.0 | 0.0 |
|  | Other health impairment | 102 | 10.8 | 81.4 | 7.8 |
|  | Specific learning disability | 472 | 6.8 | 84.1 | 9.1 |
|  | Speech or language impairment | 53 | 0.0 | 83.0 | 17.0 |
|  | Traumatic brain injury | 3 | 66.7 | 33.3 | 0.0 |
|  | Visual impairment | 3 | 0.0 | 100.0 | 0.0 |

Table S3.6: Summative Overall Proficiency Levels - Grade 5

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 3,994 | 16.4 | 65.8 | 17.8 |
| Gender | Female | 1,806 | 15.6 | 64.5 | 19.9 |
|  | Male | 2,136 | 17.0 | 66.9 | 16.1 |
|  | Missing | 52 | 21.2 | 65.4 | 13.5 |
| Ethnicity | American Indian or Alaskan Native | 10 | 30.0 | 60.0 | 10.0 |
|  | Asian | 588 | 12.9 | 65.6 | 21.4 |
|  | Black or African American | 778 | 17.5 | 66.3 | 16.2 |
|  | Hispanic or Latino | 1,445 | 17.9 | 65.2 | 17.0 |
|  | Native Hawaiian or Other Pacific Islander | 31 | 16.1 | 74.2 | 9.7 |
|  | Two or More Races | 630 | 16.7 | 69.2 | 14.1 |
|  | White | 504 | 14.5 | 61.9 | 23.6 |
|  | Other/Unknown | 8 | 0.0 | 87.5 | 12.5 |
| Other | Gifted | 13 | 7.7 | 53.8 | 38.5 |
|  | IEP | 825 | 20.0 | 73.0 | 7.0 |
|  | Migrant | 17 | 29.4 | 41.2 | 29.4 |
| Primary Disability | Autism | 57 | 52.6 | 42.1 | 5.3 |
|  | Developmental delay | 6 | 50.0 | 50.0 | 0.0 |
|  | Emotional disturbance | 16 | 18.8 | 68.8 | 12.5 |
|  | Hearing Impaired | 9 | 55.6 | 22.2 | 22.2 |
|  | Intellectual Disability | 65 | 52.3 | 47.7 | 0.0 |
|  | Multiple disabilities | 38 | 92.1 | 5.3 | 2.6 |
|  | Orthopedic impairment | 6 | 16.7 | 83.3 | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
|  | Other health impairment | 103 | 16.5 | 73.8 | 9.7 |
|  | Specific learning disability | 486 | 7.2 | 85.8 | 7.0 |
| Speech or language impairment | 29 | 3.4 | 79.3 | 17.2 |  |
| Traumatic brain injury | 6 | 66.7 | 33.3 | 0.0 |  |
| Visual impairment | 4 | 25.0 | 75.0 | 0.0 |  |

Table S3.7: Summative Overall Proficiency Levels - Grade 6

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 3,365 | 13.8 | 69.7 | 16.4 |
| Gender | Female | 1,458 | 12.7 | 71.2 | 16.1 |
|  | Male | 1,877 | 14.7 | 68.4 | 16.9 |
|  | Missing | 30 | 16.7 | 83.3 | 0.0 |
| Ethnicity | American Indian or Alaskan Native | 8 | 0.0 | 87.5 | 12.5 |
|  | Asian | 474 | 9.5 | 67.1 | 23.4 |
|  | Black or African American | 686 | 12.8 | 72.3 | 14.9 |
|  | Hispanic or Latino | 1,175 | 17.3 | 68.1 | 14.6 |
|  | Native Hawaiian or Other Pacific Islander | 23 | 8.7 | 82.6 | 8.7 |
|  | Two or More Races | 537 | 15.5 | 71.7 | 12.8 |
|  | White | 455 | 9.5 | 69.9 | 20.7 |
|  | Other/Unknown | 7 | 28.6 | 42.9 | 28.6 |
| Other | Gifted | 8 | 0.0 | 62.5 | 37.5 |
|  | Home Schooled | 1 | 0.0 | 100.0 | 0.0 |
|  | IEP | 701 | 16.0 | 78.7 | 5.3 |
|  | Migrant | 17 | 35.3 | 52.9 | 11.8 |
| Primary Disability | Autism | 49 | 57.1 | 36.7 | 6.1 |
|  | Developmental delay | 4 | 50.0 | 25.0 | 25.0 |
|  | Emotional disturbance | 18 | 5.6 | 88.9 | 5.6 |
|  | Hearing Impaired | 6 | 16.7 | 66.7 | 16.7 |
|  | Intellectual Disability | 64 | 37.5 | 59.4 | 3.1 |
|  | Multiple disabilities | 28 | 89.3 | 10.7 | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
|  | Other health impairment | 80 | 11.3 | 85.0 | 3.8 |
|  | Specific learning disability | 433 | 4.4 | 89.8 | 5.8 |
| Speech or language impairment | 14 | 7.1 | 85.7 | 7.1 |  |
| Traumatic brain injury | 5 | 40.0 | 60.0 | 0.0 |  |
| Visual impairment | 2 | 0.0 | 100.0 | 0.0 |  |

Table S3.8: Summative Overall Proficiency Levels - Grade 7

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 3,253 | 21.1 | 70.2 | 8.7 |
| Gender | Female | 1,445 | 20.4 | 69.6 | 10.0 |
|  | Male | 1,790 | 21.5 | 70.9 | 7.7 |
|  | Missing | 18 | 33.3 | 61.1 | 5.6 |
| Ethnicity | American Indian or Alaskan Native | 5 | 40.0 | 60.0 | 0.0 |
|  | Asian | 439 | 13.9 | 73.6 | 12.5 |
|  | Black or African American | 703 | 18.3 | 72.5 | 9.1 |
|  | Hispanic or Latino | 1,153 | 24.0 | 68.8 | 7.2 |
|  | Native Hawaiian or Other Pacific Islander | 31 | 9.7 | 80.6 | 9.7 |
|  | Two or More Races | 527 | 29.0 | 65.5 | 5.5 |
|  | White | 393 | 15.0 | 72.5 | 12.5 |
|  | Other/Unknown | 2 | 50.0 | 50.0 | 0.0 |
| Other | Gifted | 9 | 11.1 | 55.6 | 33.3 |
|  | IEP | 644 | 20.7 | 76.4 | 3.0 |
|  | Migrant | 11 | 27.3 | 45.5 | 27.3 |
| Primary Disability | Autism | 25 | 44.0 | 52.0 | 4.0 |
|  | Developmental delay | 5 | 100.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 8 | 37.5 | 62.5 | 0.0 |
|  | Hearing Impaired | 8 | 50.0 | 37.5 | 12.5 |
|  | Intellectual Disability | 53 | 49.1 | 50.9 | 0.0 |
|  | Multiple disabilities | 22 | 95.5 | 4.5 | 0.0 |
|  | Orthopedic impairment | 4 | 25.0 | 75.0 | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
|  | Other health impairment | 103 | 16.5 | 81.6 | 1.9 |
|  | Specific learning disability | 389 | 9.5 | 86.6 | 3.9 |
| Speech or language impairment | 13 | 15.4 | 84.6 | 0.0 |  |
| Traumatic brain injury | 9 | 33.3 | 66.7 | 0.0 |  |
| Visual impairment | 3 | 66.7 | 33.3 | 0.0 |  |

Table S3.9: Summative Overall Proficiency Levels - Grade 8

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 3,382 | 20.5 | 69.4 | 10.1 |
| Gender | Female | 1,434 | 20.2 | 68.8 | 11.0 |
|  | Male | 1,915 | 20.8 | 69.7 | 9.5 |
|  | Missing | 33 | 18.2 | 75.8 | 6.1 |
| Ethnicity | American Indian or Alaskan Native | 6 | 16.7 | 83.3 | 0.0 |
|  | Asian | 499 | 13.8 | 72.5 | 13.6 |
|  | Black or African American | 671 | 19.2 | 70.3 | 10.4 |
|  | Hispanic or Latino | 1,205 | 23.2 | 68.2 | 8.5 |
|  | Native Hawaiian or Other Pacific Islander | 25 | 12.0 | 80.0 | 8.0 |
|  | Two or More Races | 561 | 27.1 | 62.4 | 10.5 |
|  | White | 409 | 14.2 | 76.5 | 9.3 |
|  | Other/Unknown | 6 | 33.3 | 50.0 | 16.7 |
| Other | Gifted | 7 | 0.0 | 85.7 | 14.3 |
|  | IEP | 609 | 20.5 | 75.2 | 4.3 |
|  | Migrant | 16 | 31.3 | 68.8 | 0.0 |
| Primary Disability | Autism | 33 | 45.5 | 51.5 | 3.0 |
|  | Developmental delay | 7 | 85.7 | 14.3 | 0.0 |
|  | Emotional disturbance | 14 | 21.4 | 78.6 | 0.0 |
|  | Hearing Impaired | 6 | 66.7 | 33.3 | 0.0 |
|  | Intellectual Disability | 57 | 54.4 | 43.9 | 1.8 |
|  | Multiple disabilities | 27 | 88.9 | 11.1 | 0.0 |
|  | Orthopedic impairment | 4 | 0.0 | 100.0 | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: |
|  | Other health impairment | 74 | 13.5 | 79.7 | 6.8 |
|  | Specific learning disability | 378 | 8.7 | 86.2 | 5.0 |
| Speech or language impairment | 5 | 0.0 | 100.0 | 0.0 |  |
| Traumatic brain injury | 1 | 0.0 | 100.0 | 0.0 |  |
| Visual impairment | 2 | 50.0 | 50.0 | 0.0 |  |

Table S3.10: Summative Overall Proficiency Levels - Grade 9

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 4,293 | 31.6 | 64.3 | 4.1 |
| Gender | Female | 1,811 | 30.6 | 65.0 | 4.4 |
|  | Male | 2,447 | 32.3 | 63.9 | 3.8 |
|  | Missing | 35 | 37.1 | 51.4 | 11.4 |
| Ethnicity | American Indian or Alaskan Native | 4 | 0.0 | 100.0 | 0.0 |
|  | Asian | 570 | 15.1 | 76.3 | 8.6 |
|  | Black or African American | 1,037 | 29.1 | 67.1 | 3.8 |
|  | Hispanic or Latino | 1,365 | 37.1 | 60.3 | 2.6 |
|  | Native Hawaiian or Other Pacific Islander | 21 | 19.0 | 81.0 | 0.0 |
|  | Two or More Races | 835 | 43.4 | 54.0 | 2.6 |
|  | White | 447 | 21.3 | 72.5 | 6.3 |
|  | Other/Unknown | 14 | 21.4 | 71.4 | 7.1 |
| Other | Gifted | 7 | 14.3 | 85.7 | 0.0 |
|  | IEP | 612 | 28.1 | 70.6 | 1.3 |
|  | Migrant | 14 | 35.7 | 50.0 | 14.3 |
| Primary Disability | Autism | 27 | 48.1 | 51.9 | 0.0 |
|  | Deaf-blindness | 3 | 66.7 | 33.3 | 0.0 |
|  | Developmental delay | 9 | 66.7 | 33.3 | 0.0 |
|  | Emotional disturbance | 8 | 50.0 | 50.0 | 0.0 |
|  | Hearing Impaired | 15 | 46.7 | 53.3 | 0.0 |
|  | Intellectual Disability | 51 | 54.9 | 45.1 | 0.0 |
|  | Multiple disabilities | 21 | $85.7$ | 14.3 | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | ---: | ---: | ---: |
|  | Orthopedic impairment | 4 | 50.0 | 50.0 | 0.0 |
| Other health impairment | 94 | 19.1 | 76.6 | 4.3 |  |
| Specific learning disability | 368 | 17.9 | 81.0 | 1.1 |  |
| Speech or language impairment | 9 | 11.1 | 88.9 | 0.0 |  |
| Traumatic brain injury | 4 | 50.0 | 50.0 | 0.0 |  |
|  | Visual impairment | 3 | 66.7 | 33.3 | 0.0 |

Table S3.11: Summative Overall Proficiency Levels - Grade 10

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 3,674 | 24.4 | 68.6 | 7.0 |
| Gender | Female | 1,591 | 23.0 | 69.0 | 8.0 |
|  | Male | 2,066 | 25.5 | 68.2 | 6.3 |
|  | Missing | 17 | 17.6 | 82.4 | 0.0 |
| Ethnicity | American Indian or Alaskan Native | 11 | 36.4 | 63.6 | 0.0 |
|  | Asian | 569 | 12.7 | 77.0 | 10.4 |
|  | Black or African American | 852 | 21.8 | 71.6 | 6.6 |
|  | Hispanic or Latino | 1,231 | 32.1 | 63.1 | 4.8 |
|  | Native Hawaiian or Other Pacific Islander | 23 | 21.7 | 65.2 | 13.0 |
|  | Two or More Races | 586 | 25.9 | 67.4 | 6.7 |
|  | White | 395 | 20.0 | 69.1 | 10.9 |
|  | Other/Unknown | 7 | 28.6 | 71.4 | 0.0 |
| Other | Gifted | 5 | 0.0 | 60.0 | 40.0 |
|  | IEP | 525 | 24.6 | 73.1 | 2.3 |
|  | Migrant | 19 | 36.8 | 63.2 | 0.0 |
| Primary Disability | Autism | 31 | 48.4 | 48.4 | 3.2 |
|  | Developmental delay | 7 | 42.9 | 57.1 | 0.0 |
|  | Emotional disturbance | 9 | 0.0 | 100.0 | 0.0 |
|  | Hearing Impaired | 6 | 50.0 | 50.0 | 0.0 |
|  | Intellectual Disability | 42 | 54.8 | 45.2 | 0.0 |
|  | Multiple disabilities | 23 | 91.3 | 8.7 | 0.0 |
|  | Orthopedic impairment | $2$ | $100.0$ | $0.0$ | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: |
|  | Other health impairment | 62 | 29.0 | 71.0 | 0.0 |
| Specific learning disability | 318 | 11.9 | 84.9 | 3.1 |  |
| Speech or language impairment | 8 | 0.0 | 100.0 | 0.0 |  |
| Traumatic brain injury | 5 | 60.0 | 40.0 | 0.0 |  |
| Visual impairment | 5 | 40.0 | 40.0 | 20.0 |  |

Table S3.12: Summative Overall Proficiency Levels - Grade 11

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 2,997 | 16.9 | 74.4 | 8.7 |
| Gender | Female | 1,353 | 17.5 | 74.3 | 8.2 |
|  | Male | 1,619 | 16.5 | 74.4 | 9.1 |
|  | Missing | 25 | 12.0 | 84.0 | 4.0 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 100.0 | 0.0 |
|  | Asian | 545 | 10.1 | 77.6 | 12.3 |
|  | Black or African American | 792 | 17.9 | 75.6 | 6.4 |
|  | Hispanic or Latino | 912 | 22.3 | 71.1 | 6.7 |
|  | Native Hawaiian or Other Pacific Islander | 16 | 12.5 | 87.5 | 0.0 |
|  | Two or More Races | 353 | 14.7 | 75.4 | 9.9 |
|  | White | 369 | 13.8 | 73.7 | 12.5 |
|  | Other/Unknown | 7 | 28.6 | 71.4 | 0.0 |
| Other | Gifted | 3 | 0.0 | 66.7 | 33.3 |
|  | IEP | 446 | 26.0 | 71.3 | 2.7 |
|  | Migrant | 33 | 45.5 | 48.5 | 6.1 |
| Primary Disability | Autism | 14 | 57.1 | 42.9 | 0.0 |
|  | Developmental delay | 9 | 77.8 | 22.2 | 0.0 |
|  | Emotional disturbance | 14 | 14.3 | 85.7 | 0.0 |
|  | Hearing Impaired | 6 | 66.7 | 33.3 | 0.0 |
|  | Intellectual Disability | 45 | 57.8 | 42.2 | 0.0 |
|  | Multiple disabilities | 22 | 95.5 | 4.5 | 0.0 |
|  | Orthopedic impairment | 1 | $100.0$ | 0.0 | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient |
| :---: | :---: | ---: | ---: | ---: | ---: | ---: |
|  | Other health impairment | 52 | 11.5 | 86.5 | 1.9 |
|  | Specific learning disability | 274 | 14.6 | 81.8 | 3.6 |
| Speech or language impairment | 3 | 0.0 | 66.7 | 33.3 |  |
| Traumatic brain injury | 3 | 33.3 | 66.7 | 0.0 |  |
| Visual impairment | 4 | 50.0 | 50.0 | 0.0 |  |

Table S3.13: Summative Overall Proficiency Levels - Grade 12

| Subgroup | Status | N | Emerging | Progressing | Proficient |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 2,247 | 14.1 | 76.0 | 9.9 |
| Gender | Female | 1,057 | 14.3 | 76.0 | 9.7 |
|  | Male | 1,176 | 13.9 | 76.3 | 9.9 |
|  | Missing | 14 | 14.3 | 57.1 | 28.6 |
| Ethnicity | American Indian or Alaskan Native | 5 | 0.0 | 100.0 | 0.0 |
|  | Asian | 473 | 8.7 | 75.7 | 15.6 |
|  | Black or African American | 526 | 14.6 | 77.8 | 7.6 |
|  | Hispanic or Latino | 735 | 19.0 | 73.7 | 7.2 |
|  | Native Hawaiian or Other Pacific Islander | 9 | 0.0 | 77.8 | 22.2 |
|  | Two or More Races | 216 | 13.4 | 75.9 | 10.6 |
|  | White | 280 | 10.4 | 78.6 | 11.1 |
|  | Other/Unknown | 3 | 0.0 | 100.0 | 0.0 |
| Other | Gifted | 1 | 100.0 | 0.0 | 0.0 |
|  | IEP | 309 | 22.7 | 75.7 | 1.6 |
|  | Migrant | 20 | 30.0 | 65.0 | 5.0 |
| Primary Disability | Autism | 11 | 36.4 | 63.6 | 0.0 |
|  | Developmental delay | 2 | 50.0 | 50.0 | 0.0 |
|  | Emotional disturbance | 9 | 22.2 | 77.8 | 0.0 |
|  | Hearing Impaired | 2 | 0.0 | 100.0 | 0.0 |
|  | Intellectual Disability | 41 | 53.7 | 46.3 | 0.0 |
|  | Multiple disabilities | 16 | 93.8 | 6.3 | 0.0 |
|  | Other health impairment | 29 | $20.7$ | 79.3 | 0.0 |


| Subgroup | Status | N | Emerging | Progressing | Proficient |
| ---: | :---: | ---: | ---: | ---: | ---: | ---: |
|  | Specific learning disability | 197 | 10.7 | 86.8 | 2.5 |
| Traumatic brain injury | 3 | 0.0 | 100.0 | 0.0 |  |

# Section 4: Summative Assessment - Marginal Reliability 

* Domains with Exemption or Not Attempted are excluded.

Figure S4.1: Summative Marginal Reliability by Gender


* Domains with Exemption or Not Attempted are excluded.

Figure S4.2: Summative Marginal Reliability by Ethnicity


* Domains with Exemption or Not Attempted are excluded.

Figure S4.3: Summative Marginal Reliability by IEP




$\circ \mathrm{N} \circ \mathrm{Y}$

* Domains with Exemption or Not Attempted are excluded.

Figure S4.4: Summative Marginal Reliability by Primary Disability





| $\circ$ Autism | ○ Other health impairment | ○ Speech or language impairment |
| :--- | :--- | :--- |
| $\circ$ No Disability | $\circ$ Specific learning disability |  |

* Domains with Exemption or Not Attempted are excluded.


## Section 5: Summative Assessment - Conditional Standard Error of Measurement (CSEM)

Figure S5.1: Summative Conditional Standard Error of Measurement for Kindergarten


Figure S5.2: Summative Conditional Standard Error of Measurement for Grade 1



Speaking


Overall
Comprehension


$\qquad$
At Least One Domain is Not Attempted or Exempted

- Cut Scores

Figure S5.3: Summative Conditional Standard Error of Measurement for Grade 2


Figure S5.4: Summative Conditional Standard Error of Measurement for Grade 3


Figure S5.5: Summative Conditional Standard Error of Measurement for Grade 4


Figure S5.6: Summative Conditional Standard Error of Measurement for Grade 5


Figure S5.7: Summative Conditional Standard Error of Measurement for Grade 6


Figure S5.8: Summative Conditional Standard Error of Measurement for Grade 7


Figure S5.9: Summative Conditional Standard Error of Measurement for Grade 8


peaking





> Attempted All Four Domains At Least One Domain is Not Cut Scores

Figure S5.10: Summative Conditional Standard Error of Measurement for Grade 9


Figure S5.11: Summative Conditional Standard Error of Measurement for Grade 10


Figure S5.12: Summative Conditional Standard Error of Measurement for Grade 11


Figure S5.13: Summative Conditional Standard Error of Measurement for Grade 12


# Section 6: Summative Assessment - Inter-Rater Analysis 

Table S6.1: Summative Inter-Rater Result - Kindergarten

| Domain | Item ID | Score Points | Number FR | Number SR | Percent SR | Weighted Kappa | N |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Exact Agreement | within 1 Agreement | Not within 1 Agreement | Exact Agreement | within 1 Agreement | Not within 1 Agreement |
| Speaking | 4192 | 2 | 9,670 | 1,914 | 19.8 | . 8610 | 1,819 | 1,898 | 16 | 95.0 | 99.2 | 0.8 |
|  | 4194 | 2 | 9,654 | 1,908 | 19.8 | . 8050 | 1,740 | 1,891 | 17 | 91.2 | 99.1 | 0.9 |
|  | 4196 | 2 | 9,642 | 1,906 | 19.8 | . 8407 | 1,762 | 1,885 | 21 | 92.4 | 98.9 | 1.1 |
|  | 4198 | 2 | 9,595 | 1,878 | 19.6 | . 7875 | 1,496 | 1,872 | 6 | 79.7 | 99.7 | 0.3 |
|  | 4200 | 2 | 9,620 | 1,901 | 19.8 | . 7846 | 1,727 | 1,863 | 38 | 90.8 | 98.0 | 2.0 |
|  | 4202 | 2 | 9,529 | 1,857 | 19.5 | . 7957 | 1,479 | 1,811 | 46 | 79.6 | 97.5 | 2.5 |
|  | 4236 | 3 | 9,696 | 1,900 | 19.6 | . 8149 | 1,333 | 1,884 | 16 | 70.2 | 99.2 | 0.8 |
|  | 4310 | 3 | 9,696 | 1,914 | 19.7 | . 8202 | 1,371 | 1,897 | 17 | 71.6 | 99.1 | 0.9 |
|  | 4330 | 3 | 9,697 | 1,922 | 19.8 | . 8183 | 1,363 | 1,901 | 21 | 70.9 | 98.9 | 1.1 |
|  | 4338 | 3 | 9,696 | 1,920 | 19.8 | . 8099 | 1,368 | 1,895 | 25 | 71.3 | 98.7 | 1.3 |
|  | 4394 | 3 | 9,697 | 1,894 | 19.5 | . 8630 | 1,396 | 1,877 | 17 | 73.7 | 99.1 | 0.9 |

*FR: First rater; SR: Second rater.

Table S6.2: Summative Inter-Rater Result - Grade 1

| Domain | Item ID | Score Points | Number FR | Number SR | $\begin{gathered} \text { Percent } \\ \text { SR } \end{gathered}$ | Weighted Kappa | N |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Exact Agreement | within 1 Agreement | Not within 1 Agreement | Exact Agreement | within 1 Agreement | Not within 1 Agreement |
| Speaking | 598 | 2 | 8,452 | 1,679 | 19.9 | . 8175 | 1,523 | 1,664 | 15 | 90.7 | 99.1 | 0.9 |
|  | 600 | 2 | 8,444 | 1,681 | 19.9 | . 6604 | 1,467 | 1,674 | 7 | 87.3 | 99.6 | 0.4 |
|  | 602 | 2 | 8,444 | 1,681 | 19.9 | . 8722 | 1,610 | 1,677 | 4 | 95.8 | 99.8 | 0.2 |
|  | 604 | 2 | 8,437 | 1,678 | 19.9 | . 8134 | 1,520 | 1,662 | 16 | 90.6 | 99.0 | 1.0 |
|  | 606 | 2 | 8,420 | 1,671 | 19.8 | . 6362 | 1,375 | 1,640 | 31 | 82.3 | 98.1 | 1.9 |
|  | 634 | 3 | 8,470 | 1,683 | 19.9 | . 6593 | 1,217 | 1,644 | 39 | 72.3 | 97.7 | 2.3 |
|  | 700 | 3 | 8,440 | 1,678 | 19.9 | . 9133 | 1,462 | 1,674 | 4 | 87.1 | 99.8 | 0.2 |
|  | 682 | 4 | 8,467 | 1,682 | 19.9 | . 6803 | 1,074 | 1,628 | 54 | 63.9 | 96.8 | 3.2 |
|  | 660 | 5 | 8,407 | 1,666 | 19.8 | . 8370 | 939 | 1,597 | 69 | 56.4 | 95.9 | 4.1 |

Table S6.3: Summative Inter-Rater Result - Grade Band 2-3

| Domain | Item ID | Score Points | Number FR | Number SR | Percent SR | Weighted Kappa | N |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Exact Agreement | within 1 Agreement | Not within 1 Agreement | Exact <br> Agreement | within 1 Agreement | Not within 1 Agreement |
| Speaking | 1348 | 2 | 12,510 | 2,489 | 19.9 | . 7882 | 2,242 | 2,473 | 16 | 90.1 | 99.4 | 0.6 |
|  | 1350 | 2 | 12,465 | 2,477 | 19.9 | . 8236 | 2,231 | 2,456 | 21 | 90.1 | 99.2 | 0.8 |
|  | 1352 | 2 | 12,505 | 2,489 | 19.9 | . 7922 | 2,164 | 2,483 | 6 | 86.9 | 99.8 | 0.2 |
|  | 1354 | 2 | 12,501 | 2,490 | 19.9 | . 6894 | 2,171 | 2,481 | 9 | 87.2 | 99.6 | 0.4 |
|  | 1356 | 2 | 12,486 | 2,486 | 19.9 | . 7980 | 2,334 | 2,467 | 19 | 93.9 | 99.2 | 0.8 |
|  | 1394 | 3 | 12,483 | 2,480 | 19.9 | . 8178 | 1,780 | 2,458 | 22 | 71.8 | 99.1 | 0.9 |
|  | 1406 | 3 | 12,559 | 2,493 | 19.9 | . 8472 | 2,048 | 2,461 | 32 | 82.2 | 98.7 | 1.3 |
|  | 1448 | 4 | 12,497 | 2,484 | 19.9 | . 8623 | 1,805 | 2,365 | 119 | 72.7 | 95.2 | 4.8 |
|  | 1440 | 5 | 12,466 | 2,473 | 19.8 | . 8410 | 1,577 | 2,398 | 75 | 63.8 | 97.0 | 3.0 |
| Writing | 1496 | 3 | 12,546 | 2,281 | 18.2 | . 8280 | 1,683 | 2,256 | 25 | 73.8 | 98.9 | 1.1 |
|  | 1512 | 3 | 12,561 | 2,179 | 17.3 | . 8634 | 1,729 | 2,163 | 16 | 79.3 | 99.3 | 0.7 |
|  | 1464 | 4 | 12,481 | 2,471 | 19.8 | . 8620 | 1,808 | 2,430 | 41 | 73.2 | 98.3 | 1.7 |
|  | 1586 | 4 | 12,508 | 2,474 | 19.8 | . 8261 | 1,711 | 2,464 | 10 | 69.2 | 99.6 | 0.4 |

*FR: First rater; SR: Second rater.

Table S6.4: Summative Inter-Rater Result - Grade Band 4-5

| Domain | Item ID | Score Points | Number FR | Number SR | Percent SR | Weighted Kappa | N |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Exact Agreement | within 1 Agreement | Not within 1 Agreement | Exact <br> Agreement | within 1 Agreement | Not within 1 Agreement |
| Speaking | 2116 | 3 | 7,960 | 1,579 | 19.8 | . 7552 | 1,135 | 1,547 | 32 | 71.9 | 98.0 | 2.0 |
|  | 2150 | 3 | 8,021 | 1,597 | 19.9 | . 6788 | 1,083 | 1,582 | 15 | 67.8 | 99.1 | 0.9 |
|  | 2184 | 3 | 7,970 | 1,586 | 19.9 | . 9353 | 1,466 | 1,581 | 5 | 92.4 | 99.7 | 0.3 |
|  | 2186 | 3 | 7,943 | 1,576 | 19.8 | . 8375 | 1,231 | 1,553 | 23 | 78.1 | 98.5 | 1.5 |
|  | 2188 | 3 | 7,945 | 1,577 | 19.8 | . 7630 | 1,152 | 1,549 | 28 | 73.1 | 98.2 | 1.8 |
|  | 2098 | 5 | 7,951 | 1,579 | 19.9 | . 8563 | 1,097 | 1,506 | 73 | 69.5 | 95.4 | 4.6 |
|  | 2100 | 5 | 7,959 | 1,581 | 19.9 | . 7679 | 907 | 1,524 | 57 | 57.4 | 96.4 | 3.6 |
|  | 2206 | 5 | 7,948 | 1,575 | 19.8 | . 7968 | 852 | 1,521 | 54 | 54.1 | 96.6 | 3.4 |
| Writing | 2350 | 3 | 7,961 | 1,545 | 19.4 | . 8472 | 1,223 | 1,522 | 23 | 79.2 | 98.5 | 1.5 |
|  | 2352 | 3 | 7,953 | 1,542 | 19.4 | . 8518 | 1,214 | 1,521 | 21 | 78.7 | 98.6 | 1.4 |
|  | 2354 | 3 | 7,956 | 1,555 | 19.5 | . 8618 | 1,195 | 1,540 | 15 | 76.8 | 99.0 | 1.0 |
|  | 2344 | 4 | 7,953 | 1,586 | 19.9 | . 8127 | 1,007 | 1,529 | 57 | 63.5 | 96.4 | 3.6 |
|  | 2306 | 5 | 7,930 | 1,567 | 19.8 | . 8440 | 994 | 1,524 | 43 | 63.4 | 97.3 | 2.7 |

* FR: First rater; SR: Second rater.

Table S6.5: Summative Inter-Rater Result - Grade Band 6-8

| Domain | Item ID | Score <br> Points | Number FR | Number SR | $\begin{aligned} & \text { Percent } \\ & \text { SR } \end{aligned}$ | Weighted Kappa | N |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Exact Agreement | within 1 Agreement | Not within 1 Agreement | Exact <br> Agreement | within 1 Agreement | Not within 1 Agreement |
| Speaking | 2672 | 3 | 9,429 | 1,864 | 19.8 | .7800 | 1,396 | 1,856 | 8 | 74.9 | 99.6 | 0.4 |
|  | 2676 | 3 | 9,399 | 1,855 | 19.7 | . 8194 | 1,522 | 1,814 | 41 | 82.0 | 97.8 | 2.2 |
|  | 2678 | 3 | 9,354 | 1,839 | 19.7 | . 8024 | 1,518 | 1,818 | 21 | 82.5 | 98.9 | 1.1 |
|  | 2680 | 3 | 9,383 | 1,849 | 19.7 | . 8506 | 1,551 | 1,828 | 21 | 83.9 | 98.9 | 1.1 |
|  | 2654 | 5 | 9,347 | 1,831 | 19.6 | . 8755 | 1,205 | 1,763 | 68 | 65.8 | 96.3 | 3.7 |
|  | 2656 | 5 | 9,348 | 1,840 | 19.7 | . 8642 | 1,273 | 1,784 | 56 | 69.2 | 97.0 | 3.0 |
|  | 2706 | 5 | 9,394 | 1,849 | 19.7 | . 9002 | 1,299 | 1,806 | 43 | 70.3 | 97.7 | 2.3 |
| Writing | 2778 | 3 | 9,505 | 1,874 | 19.7 | . 8401 | 1,354 | 1,861 | 13 | 72.3 | 99.3 | 0.7 |
|  | 2806 | 3 | 9,534 | 1,826 | 19.2 | . 8740 | 1,464 | 1,812 | 14 | 80.2 | 99.2 | 0.8 |
|  | 2808 | 3 | 9,522 | 1,819 | 19.1 | . 8594 | 1,425 | 1,810 | 9 | 78.3 | 99.5 | 0.5 |
|  | 2810 | 3 | 9,532 | 1,850 | 19.4 | . 8556 | 1,441 | 1,834 | 16 | 77.9 | 99.1 | 0.9 |
|  | 2752 | 5 | 9,504 | 1,874 | 19.7 | . 8596 | 1,169 | 1,837 | 37 | 62.4 | 98.0 | 2.0 |
|  | 2796 | 5 | 9,517 | 1,869 | 19.6 | . 8645 | 1,310 | 1,856 | 13 | 70.1 | 99.3 | 0.7 |

* FR: First rater; SR: Second rater.

Table S6.6: Summative Inter-Rater Result - Grade Band 9-12

| Domain | Item ID | Score <br> Points | Number FR | Number SR | $\begin{aligned} & \text { Percent } \\ & \text { SR } \end{aligned}$ | Weighted Kappa | N |  |  | Percent |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Exact Agreement | within 1 Agreement | Not within 1 Agreement | Exact <br> Agreement | within 1 Agreement | Not within 1 Agreement |
| Speaking | 3374 | 3 | 12,445 | 2,441 | 19.6 | . 7486 | 1,737 | 2,421 | 20 | 71.2 | 99.2 | 0.8 |
|  | 3382 | 3 | 12,394 | 2,441 | 19.7 | . 8182 | 1,953 | 2,393 | 48 | 80.0 | 98.0 | 2.0 |
|  | 3384 | 3 | 12,322 | 2,423 | 19.7 | . 7981 | 1,912 | 2,383 | 40 | 78.9 | 98.3 | 1.7 |
|  | 3386 | 3 | 12,346 | 2,422 | 19.6 | . 7466 | 1,738 | 2,399 | 23 | 71.8 | 99.1 | 0.9 |
|  | 3352 | 5 | 12,378 | 2,438 | 19.7 | . 8624 | 1,795 | 2,316 | 122 | 73.6 | 95.0 | 5.0 |
|  | 3354 | 5 | 12,286 | 2,414 | 19.6 | . 8935 | 1,551 | 2,308 | 106 | 64.3 | 95.6 | 4.4 |
|  | 3406 | 5 | 12,348 | 2,418 | 19.6 | . 8479 | 1,435 | 2,321 | 97 | 59.3 | 96.0 | 4.0 |
| Writing | 3490 | 3 | 12,416 | 2,431 | 19.6 | . 7679 | 1,519 | 2,403 | 28 | 62.5 | 98.8 | 1.2 |
|  | 3516 | 3 | 12,513 | 2,364 | 18.9 | . 8223 | 1,811 | 2,326 | 38 | 76.6 | 98.4 | 1.6 |
|  | 3518 | 3 | 12,490 | 2,355 | 18.9 | . 8290 | 1,792 | 2,335 | 20 | 76.1 | 99.2 | 0.8 |
|  | 3520 | 3 | 12,503 | 2,379 | 19.0 | . 8390 | 1,824 | 2,352 | 27 | 76.7 | 98.9 | 1.1 |
|  | 3456 | 5 | 12,411 | 2,430 | 19.6 | . 8374 | 1,554 | 2,398 | 32 | 64.0 | 98.7 | 1.3 |
|  | 3494 | 5 | 12,401 | 2,417 | 19.5 | . 8698 | 1,561 | 2,388 | 29 | 64.6 | 98.8 | 1.2 |

* FR: First rater; SR: Second rater.


# Section 7: Summative Assessment - Dimensionality 

Figure S7.1: Summative Validity - Dimensionality for Kindergarten
Grade K


Figure S7.2: Summative Validity - Dimensionality for Grade 1
Grade 1


Figure S7.3: Summative Validity - Dimensionality for Grade Band 2-3

Grade 2


Grade 3


Figure S7.4: Summative Validity - Dimensionality for Grade Band 4-5

Grade 4


Grade 5


Figure S7.5: Summative Validity - Dimensionality for Grade Band 6-8



Grade 8


Figure S7.6: Summative Validity - Dimensionality for Grade Band 9-12


Section 8: Summative Assessment - Ability vs. Difficulty

Figure S8.1: Summative Validity - Ability vs. Difficulty for Kindergarten


* The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75 , are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S8.2: Summative Validity - Ability vs. Difficulty for Grade 1


* The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75 , are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S8.3: Summative Validity - Ability vs. Difficulty for Grade Band 2-3


* The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75 , are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S8.4: Summative Validity - Ability vs. Difficulty for Grade Band 4-5


* The probability density is the probability per unit on the $x$-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75 , are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S8.5: Summative Validity - Ability vs. Difficulty for Grade Band 6-8


* The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75 , are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.

Figure S8.6: Summative Validity - Ability vs. Difficulty for Grade Band 9-12


* The probability density is the probability per unit on the x-axis (in this case theta). The peaks of the plot, for example, 0.50 or 0.75 , are the locations where there is the highest concentrations of items or persons. The feature of the density plot is that the total area under the curve integrates to one.


# TECHNICAL REPORT <br> PART II-SCREENER ASSESSMENT 

# Ohio English Language Proficiency ScreenerListening, Reading, Speaking, and Writing 

## Grades K-12

2019-2020 Administration

Submitted to:
Ohio Department of Education

Submitted by:
Cambium Assessment, Inc.
1000 Thomas Jefferson Street, NW
Washington, DC 20007

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## Chapter 1. Introduction

The English Language Proficiency Assessment for the 21st Century (ELPA21) is a testing program in which multiple states participate to support educators, member states, and members of the public as they adopt and implement the English Language Proficiency (ELP) standards and college- and career-ready standards. The assessment includes tests on listening, reading, speaking, and writing for students in kindergarten, grade 1 , grades $2-3$, grades $4-5$, grades $6-8$, and grades 9-12.

In addition to the summative assessment, in 2017, the program also developed the ELPA21 screener. The purpose of the screener is to identify students who require English language development instruction. The ELPA21 screener is an assessment of a student's language proficiency in the required domains of listening, reading, speaking, and writing. The test questions are based on the same ELP standards adopted by the ELPA21 member states. Ohio is a member of the ELPA21 consortium, and the screener assessment is called the Ohio English Language Proficiency Screener (OELPS).

Part II of the technical report focuses on the 2019-2020 test administration of the OELPS assessments. The screener assessments adopted the same achievement standards, used the same scoring method (but different additional rules as listed in Section 2.5, Scoring Rules for Screener Tests, of this report), and followed the same quality control procedures as the summative assessment. The screener scores were reported online.

Part II includes the following chapters on the screener tests:

- Chapter 1. Introduction
- Chapter 2. Test Administration
- Chapter 3. 2019-2020 Summary
- Chapter 4. Reliability
- Chapter 5. Validity
- Chapter 6. Reporting

The results of the 2019-2020 OELPS are included in this document and Part II of the appendix.

## Chapter 2. Test Administration

### 2.1 Testing Window

The 2019-2020 testing windows were scheduled from August 5, 2019 to June 30, 2020, for the screener assessment, and from February 2 to March 27, 2019, for the summative assessment. However, in March 2020, Ohio ordered school-building closure and passed subsequent emergency legislation addressing the coronavirus (COVID-19) pandemic-related issues (House Bill 197 of the 133rd General Assembly). The Ohio General Assembly subsequently passed emergency legislation canceling the spring administration of Ohio's State Tests, including both OH ELPA summative and screener assessments ${ }^{1}$. Therefore, both test windows were halted as of March 17, 2020, with the ordered school-building closure.

### 2.2 Test Design

Each 2019-2020 OELPS assessment has one online form, one paper-pencil form, and one braille form.

The online form has three steps. Step 1 consists of practice items, while Steps 2 and 3 include operational items. To allow for domain exemptions and because Test Administrator (TA) input is required (at the end of Step 1 and for the scoring of speaking items in Step 2), the three steps are administered as nine segments with various possible routes through a subset of those segments, as shown in Figure 2.1. The content of the segments includes the following:

- Segment 1 includes non-scored, practice items. At the end of Segment 1, the TA indicates whether the student should proceed to the operational items. If the TA determines that the test should not proceed, the student is directed to Segment 9, which contains one non-scored survey item, and then the test ends. Students who do not proceed to do the test are designated "Proficiency Not Demonstrated." If the TA indicates the test should proceed, then the student is routed to Segment 2 (Step 2A) unless the student is exempted from the speaking domain, in which case the student is routed to Segment 7 (modified version of Step 2).
- Segment 2 (Step 2A) consists of on-the-fly scored, speaking items. After the student responds to these items, the TA assigns a score to each item. From Segment 2 (Step 2A), most students are routed to Segment 3 (Step 2B). However, students who are exempted from the listening, reading, and/or writing domains proceed to Segment 5.
- Segment 3 (Step 2B) consists of machine-scored operational items from the listening, reading, and writing domains. After the student completes Segment 3, a summed score is computed from all the item scores in Step 2 (Segments 2 and 3). If this summed score is below a threshold score, the test ends. If the raw score meets or exceeds the threshold score, the test is routed to Segment 4 (see Table 2.1 for threshold information).

[^6]- Segment 4 (Step 3) includes operationally scored items from all domains.
- Segment 5 (Step 2B for students who are exempted from the listening, reading, and/or writing domain) consists of operational machine-scored items from all non-exempted domains. Upon completion of Segment 5, students proceed to Segment 6, regardless of score.
- Segment 7 (Step 2 for students who are exempted from the speaking domain) consists of machine-scored operational items from the listening, reading, and writing domains. Students are administered the form for which their exempted domains are suppressed. Upon completion of Segment 7, students proceed to Segment 8 regardless of score.
- Segment 8 (Step 3 for students who are exempted from the speaking domain) consists of items from all non-exempted domains in addition to the speaking domain.
- Segment 9 (Step 1) contains a survey item that allows TAs to describe why the student did not engage with the screener assessment.

The online test routing design is displayed in Figure 2.1.
Figure 2.1 2019-2020 ELPA21 Screener Online Test Design


[^7]Table 2.1 Threshold Step 2 Summed Scores for Proceeding to Step 3

| Grade Band | Threshold Score | Step 2 Max Score |
| :---: | :---: | :---: |
| K | 23 | 26 |
| 1 | 24 | 27 |
| $2-3$ | 25 | 28 |
| $4-5$ | 26 | 31 |
| $6-8$ | 28 | 33 |
| $9-12$ | 27 | 30 |

The paper-pencil form has five segments:

- Segment 1 (Step 1) includes non-scored, practice items. At the end of Segment 1, the TA indicates whether the student should proceed to the operational items. If the TA determines that the test should not proceed, the test ends.
- Segment 2 (Step 2) includes operational items from all four domains. After data entry is completed for Segment 2, a summed score is computed from all the item scores in this segment. If this summed score is below a threshold score, the test ends. If the raw score meets or exceeds the threshold score, the test is routed to Segment 3 (see Table 2.1 for threshold information).
- Segment 3 (Step 3) includes operational items from all four domains.
- Segment 4 (Step 2 for students with any domain exemption) and Segment 5 (Step 3 for students with any domain exemption) include operational items from all non-exempted domains. Tests proceed from Segment 4 to Segment 5 regardless of score.

Figure 2.2 displays the test design for the paper-pencil screener test. For the paper-pencil form, after test administration, student responses were entered into the Cambium Assessment, Inc. (CAI) Data Entry Interface (DEI) on the state testing portal for all ELPA21 domain tests. Practice test items were not entered in the DEI and were not scored.

Figure 2.2 2019-2020 ELPA21 Screener Paper-Pencil Test Design


The braille form includes two segments: In Segment 1, the TA indicates whether the student should proceed to the operational items. If so, the student is routed to Segment 2, which contains operational items for all domains. If the TA indicates the student should not proceed, then the test ends.

The non-domain-exempted form summary of the screener tests is listed in Tables 2.2-2.4. Specifically, Table 2.2 includes items from Segments 2-4, Table 2.3 includes items from Segments 2-3, and Table 2.4 includes items from Segment 2.

Table 2.2 Number of Operational Items and Score Points—Online Screener

|  | Grade/Grade Band |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| Domain | Items | Score Points | Items | Score <br> Points | Items | Score Points | Items | Score <br> Points | Items | Score Points | Items | Score Points |
| Listening | 13 | 13 | 11 | 11 | 11 | 11 | 10 | 10 | 17 | 18 | 15 | 18 |
| Reading | 9 | 9 | 13 | 13 | 11 | 13 | 21 | 23 | 13 | 13 | 16 | 17 |
| Speaking | 6 | 14 | 6 | 15 | 6 | 14 | 7 | 21 | 9 | 27 | 9 | 27 |
| Writing | 10 | 10 | 11 | 11 | 14 | 17 | 9 | 21 | 7 | 23 | 6 | 20 |

Table 2.3 Number of Operational Items and Score Points—Paper Screener

| Domain | Grade/Grade Band |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
|  | Items | $\begin{aligned} & \text { Score } \\ & \text { Points } \end{aligned}$ | Items | $\begin{aligned} & \text { Score } \\ & \text { Points } \end{aligned}$ | Items | $\begin{aligned} & \text { Score } \\ & \text { Points } \end{aligned}$ | Items | $\begin{aligned} & \text { Score } \\ & \text { Points } \end{aligned}$ | Items | $\begin{aligned} & \text { Score } \\ & \text { Points } \end{aligned}$ | Items | Score Points |
| Listening | 13 | 13 | 11 | 11 | 11 | 11 | 10 | 10 | 17 | 18 | 15 | 18 |
| Reading | 9 | 9 | 13 | 13 | 11 | 13 | 21 | 23 | 13 | 13 | 16 | 17 |
| Speaking | 6 | 14 | 6 | 15 | 6 | 14 | 7 | 21 | 9 | 27 | 9 | 27 |
| Writing | 10 | 10 | 11 | 11 | 14 | 17 | 9 | 21 | 7 | 23 | 6 | 20 |

Table 2.4 Number of Operational Items and Score Points—Braille Screener

|  | Grade/Grade Band |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| Domain | Items | Score Points | Items | Score Points | Items | Score Points | Items | Score <br> Points | Items | Score Points | Items | Score Points |
| Listening | 9 | 9 | 9 | 9 | 10 | 10 | 11 | 11 | 11 | 12 | 10 | 13 |
| Reading | 11 | 11 | 9 | 9 | 8 | 10 | 13 | 15 | 11 | 11 | 12 | 13 |
| Speaking | 6 | 14 | 6 | 16 | 6 | 16 | 8 | 29 | 8 | 25 | 8 | 25 |
| Writing | 8 | 8 | 8 | 8 | 10 | 13 | 9 | 21 | 7 | 23 | 8 | 26 |

### 2.3 Test Administration Mandal

### 2.3.1 Directions for Administration

For the 2019-2020 administration, a Test Administration Manual (TAM) was developed for each state, including Ohio. The TAM guides TAs in test administration.

The TAM for the screener tests usually includes the following key points:

- Overview of the ELPA21 screener
- TA qualifications
- Preliminary planning
- Materials required
- Administrative considerations
- Student preparation/guidance in Step 1
- Administrative guidance in Step 2 and Step 3
- Test security instructions in each of the three steps
- Contact information for user support


### 2.3.2 Training/Practice Tests

To help TAs and students familiarize themselves with the online registration and test delivery systems, training or practice tests (Step 1 in screener tests) were provided before and during the testing windows. Training/practice tests can be accessed through a non-secure browser or a secure browser. For screener assessments, the tests become secure automatically when students proceed to Step 2.

The training/practice tests have two components: one for TAs to create and manage the training/practice test sessions, and the second for students to take an actual training/practice test.

The Practice Test Administration site introduces TAs to

- logging in;
- starting a test session;
- providing the session ID to the students signing in to the TA session;
- monitoring students' progress throughout their tests; and
- stopping the test.

The Practice Tests site introduces students to

- signing in;
- verifying student information;
- selecting a test;
- waiting for the TA to check the test settings and approve participation;
- starting the test (adjusting the audio sound, checking the microphone for recording speaking responses, and reviewing test instructions);
- taking the test; and
- submitting the test.


### 2.4 Test Security

The test security procedures are consistent across all assessments in each state. Details about student-level testing confidentiality, system security, testing environment security, and documentation of test security violations can be found in Chapter 9, Quality Control, in Part I of the technical report.

### 2.5 Scoring Rules for Screener Tests

The scoring rules applied to the 2019-2020 OELPS include the following:

- All pending and expired test records in Step 2 should be scored.
- If a single item in Step 2 is attempted, all domains without domain exemptions are considered attempted, and all non-attempted items in Step 2 should be given a score of zero.
- If the student's test is stopped by the automatic stopping rule after Step 2, items in Step 3 should be treated as not presented. If the student's test continues to Step 3, all items in Step 3 that the student does not respond to should be scored as zero.
- If a student has a domain exemption for a domain, the domain is reported as exempt if it is not attempted.
- For online tests, any domain exemptions must be entered in the Test Information Distribution Engine (TIDE) prior to the student starting the test. Students taking the online screener will be presented only with items in non-exempt domains.
- For paper-pencil tests, TAs are told which items to not administer if the student has any domain exemptions. However, if a student is exempt from a domain but responses to any items in the domain are entered in the DEI, the domain will be scored as though the student was not exempt.
- For OELPS, handscored items are scored by local TAs.
- Tests in which the TA indicates that the student will not continue after the Step 1 practice items will be scored as follows:
- Each domain will be scored 0 . The score of 0 will receive a label of "Performance Not Determined."
- Proficiency status will be scored as "D" and reported as "Proficiency Not Demonstrated."


### 2.6 Handscoring

Handscoring for screener tests followed the same procedure with the same vendor as the handscoring for summative tests (see Section 3.5 in Part I of the technical report).

### 2.6.1 Rules for Handscoring

The following rules are employed to handscore the items in the screener assessment:

- Each response is scored by at least one rater (R1). Ten percent of all responses receive a second reading for the purpose of monitoring and maintaining sufficient inter-rater reliability (R2).
- Final item score is reported as R1 score.
- All responses that are identified as non-scorable and assigned a condition code are routed for verification by a Team Leader or Scoring Director.

The condition code categories and the rules for evaluating a potential non-scorable response in the speaking domain are summarized in Section 3.5.1 in Part I of the technical report.

## Chapter 3. 2019-2020 Summary

The 2019-2020 OELPS results are presented in this chapter and in Sections 1-3 of Part II of the appendix. The results in each section are illustrated below:

- Section 1. Screener Assessment-Scale Score Summary
- Tables S1.1-S1.13 present the number of students, the minimum, average, maximum, and standard deviation of domain, overall, and comprehension scores by subgroups in each grade of $\mathrm{K}-12$.
- Section 2. Screener Assessment—Percentage of Students by Domain Performance Level
- Tables S2.1-S2.13 present the total number of students taking each domain test and the percentage of students in each performance level by domain test and by subgroups.
- Section 3. Screener Assessment-Percentage of Students by Overall Proficiency Level
- Tables S3.1-S3.13 present the total number of students who are categorized in each of the overall proficiency levels: Emerging, Progressing, and Proficient by subgroups.


### 3.1 2019-2020 Student Participation

Table 3.1 summarizes student participation in each mode of testing. Most students took online forms ( $99.69 \%$ ), followed by paper-pencil forms $(0.31 \%)$. No student took braille forms in the 2019-2020 OELPS assessment.

Table 3.2 and Table 3.3 present the frequencies of students who took summative and screener tests, and participation by grade, respectively. The tables show that the highest percentage of students taking the screener tests were in kindergarten, followed by high school students.

Table 3.3 shows the participation by subgroup. There were more male students than female students. Most students are in the Hispanic or Latino group ( $26.6 \%-36.6 \%$ ), followed by African American students ( $17.1 \%-20.7 \%$ ), and Asian students ( $14.7 \%-28.1 \%$ ). About $0.1 \%-0.4 \%$ of the students have migrated to the United States from other countries. The percentage of students who have Individualized Education Programs (IEPs) ranges from $0.7 \%-1.4 \%$. About $0.7 \%-1.6 \%$ of the students have disabilities. Most students identified as having a speech or language impairment are in kindergarten $(0.7 \%)$, grade $1(0.4 \%)$, and grade band $2-3(0.3 \%)$, while more students identified as having a specific learning disability are in upper grades: $0.4 \%$ in grade band $4-5$, $0.7 \%$ in middle school, and $0.4 \%$ in high school.

Table 3.1 Student Participation by Test Mode

| Grade | Total | Braille |  |  | Online |  | Paper |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | \% | N | \% | N |  | \% |
| K | 9,968 |  | 0 | 0.0 | 9,913 | 99.45 |  | 55 | 0.55 |
| 1 | 1,615 |  | 0 | 0.0 | 1,614 | 99.94 |  | 1 | 0.06 |
| 2 | 1,242 |  | 0 | 0.0 | 1,240 | 99.84 |  | 2 | 0.16 |


| Grade | Total | Braille |  |  | Online |  | Paper |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | \% | N | \% | N |  | \% |
| 3 | 1,086 |  | 0 | 0.0 | 1,084 | 99.82 |  | 2 | 0.18 |
| 4 | 931 |  | 0 | 0.0 | 931 | 100.00 |  | 0 | 0.00 |
| 5 | 931 |  | 0 | 0.0 | 931 | 100.00 |  | 0 | 0.00 |
| 6 | 783 |  | 0 | 0.0 | 781 | 99.74 |  | 2 | 0.26 |
| 7 | 835 |  | 0 | 0.0 | 833 | 99.76 |  | 2 | 0.24 |
| 8 | 685 |  | 0 | 0.0 | 685 | 100.00 |  | 0 | 0.00 |
| 9 | 1,300 |  | 0 | 0.0 | 1,300 | 100.00 |  | 0 | 0.00 |
| 10 | 680 |  | 0 | 0.0 | 680 | 100.00 |  | 0 | 0.00 |
| 11 | 419 |  | 0 | 0.0 | 419 | 100.00 |  | 0 | 0.00 |
| 12 | 252 |  | 0 | 0.0 | 252 | 100.00 |  | 0 | 0.00 |
| Total | 20,727 |  | 0 | 0.0 | 20,663 | 99.69 |  | 64 | 0.31 |

Table 3.2 Number of Students for 2019-2020 OELPA and OELPS

| Grade/Grade <br> Band | N OELPA | N OELPS | N Both |
| :---: | ---: | ---: | ---: |
| $\mathbf{K}$ | 10,123 | 9,968 | 8,971 |
| $\mathbf{1}$ | 8,802 | 1,615 | 1,232 |
| $\mathbf{2 - 3}$ | 13,175 | 2,328 | 1,744 |
| $\mathbf{4 - 5}$ | 8,413 | 1,862 | 1,236 |
| $\mathbf{6 - 8}$ | 10,000 | 2,303 | 1,603 |
| $\mathbf{9 - 1 2}$ | 13,211 | 2,651 | 1,992 |

Table 3.3 2019-2020 Student Participation in OELPS Tests

| Subgroup | Status | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
| Total |  | 9,968 | 100.0 | 1,615 | 100.0 | 2,328 | 100.0 | 1,862 | 100.0 | 2,303 | 100.0 | 2,651 | 100.0 |
|  | K | 9,968 | 100.0 |  |  |  |  |  |  |  |  |  |  |
|  | 1 |  |  | 1,615 | 100.0 |  |  |  |  |  |  |  |  |
|  | 2 |  |  |  |  | 1,242 | 53.4 |  |  |  |  |  |  |
|  | 3 |  |  |  |  | 1,086 | 46.6 |  |  |  |  |  |  |
|  | 4 |  |  |  |  |  |  | 931 | 50.0 |  |  |  |  |
|  | 5 |  |  |  |  |  |  | 931 | 50.0 |  |  |  |  |
| Grade | 6 |  |  |  |  |  |  |  |  | 783 | 34.0 |  |  |
|  | 7 |  |  |  |  |  |  |  |  | 835 | 36.3 |  |  |
|  | 8 |  |  |  |  |  |  |  |  | 685 | 29.7 |  |  |
|  | 9 |  |  |  |  |  |  |  |  |  |  | 1,300 | 49.0 |
|  | 10 |  |  |  |  |  |  |  |  |  |  | 680 | 25.7 |
|  | 11 |  |  |  |  |  |  |  |  |  |  | 419 | 15.8 |
|  | 12 |  |  |  |  |  |  |  |  |  |  | 252 | 9.5 |
|  | Female | 4,494 | 45.1 | 717 | 44.4 | 999 | 42.9 | 835 | 44.8 | 1,034 | 44.9 | 1,149 | 43.3 |
| Gender | Male | 4,684 | 47.0 | 759 | 47.0 | 1,174 | 50.4 | 907 | 48.7 | 1,121 | 48.7 | 1,316 | 49.6 |
|  | Missing | 790 | 7.9 | 139 | 8.6 | 155 | 6.7 | 120 | 6.4 | 148 | 6.4 | 186 | 7.0 |
|  | American Indian or Alaskan Native | 24 | 0.2 | 3 | 0.2 | 5 | 0.2 | 6 | 0.3 | 6 | 0.3 | 3 | 0.1 |
|  | Asian | 2,493 | 25.0 | 454 | 28.1 | 512 | 22.0 | 373 | 20.0 | 362 | 15.7 | 391 | 14.7 |
| Ethnicity | Black or African American | 1,797 | 18.0 | 276 | 17.1 | 450 | 19.3 | 371 | 19.9 | 456 | 19.8 | 548 | 20.7 |
|  | Hispanic or Latino | 2,671 | 26.8 | 429 | 26.6 | 676 | 29.0 | 549 | 29.5 | 843 | 36.6 | 956 | 36.1 |


| Subgroup | Status | K |  | 1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | \% | N | \% | N | \% | N | \% | N | \% | N | \% |
|  | Native Hawaiian or Other Pacific Islander | 46 | 0.5 | 10 | 0.6 | 15 | 0.6 | 13 | 0.7 | 10 | 0.4 | 17 | 0.6 |
|  | Two or More Races | 1,034 | 10.4 | 165 | 10.2 | 292 | 12.5 | 244 | 13.1 | 278 | 12.1 | 334 | 12.6 |
|  | White | 1,672 | 16.8 | 260 | 16.1 | 345 | 14.8 | 285 | 15.3 | 325 | 14.1 | 339 | 12.8 |
|  | Other/Unknown | 231 | 2.3 | 18 | 1.1 | 33 | 1.4 | 21 | 1.1 | 23 | 1.0 | 63 | 2.4 |
| Other | Gifted | 23 | 0.2 | 9 | 0.6 | 22 | 0.9 | 14 | 0.8 | 7 | 0.3 | 1 | 0.0 |
|  | IEP | 131 | 1.3 | 13 | 0.8 | 19 | 0.8 | 24 | 1.3 | 32 | 1.4 | 19 | 0.7 |
|  | Migrant | 9 | 0.1 | 7 | 0.4 | 5 | 0.2 | 4 | 0.2 | 10 | 0.4 | 4 | 0.2 |
| Primary Disability | Autism | 38 | 0.4 | 4 | 0.2 | 3 | 0.1 | 5 | 0.3 | 4 | 0.2 |  |  |
|  | Developmental delay | 5 | 0.1 |  |  |  |  | 1 | 0.1 |  |  | 1 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 1 | 0.1 |  |  | 3 | 0.2 |  |  | 1 | 0.0 |
|  | Hearing Impaired | 3 | 0.0 |  |  | 1 | 0.0 | 1 | 0.1 |  |  |  |  |
|  | Intellectual Disability | 5 | 0.1 |  |  | 2 | 0.1 | 2 | 0.1 | 3 | 0.1 | 4 | 0.2 |
|  | Multiple disabilities | 9 | 0.1 |  |  | 3 | 0.1 | 2 | 0.1 | 1 | 0.0 | 1 | 0.0 |
|  | Orthopedic impairment | 2 | 0.0 | 1 | 0.1 |  |  | 1 | 0.1 |  |  |  |  |
|  | Other health impairment | 7 | 0.1 | 1 | 0.1 | 3 | 0.1 | 2 | 0.1 | 8 | 0.3 | 3 | 0.1 |
|  | Specific learning disability | 7 | 0.1 | 1 | 0.1 | 2 | 0.1 | 7 | 0.4 | 15 | 0.7 | 11 | 0.4 |
|  | Speech or language impairment | 65 | 0.7 | 6 | 0.4 | 6 | 0.3 | 2 | 0.1 |  |  | 1 | 0.0 |
|  | Visual impairment |  |  |  |  |  |  |  |  | 1 | 0.0 |  |  |

### 3.2 2019-2020 Student Scale Score and Performance Summary

Table 3.4 shows the number and percentages of students who had a domain exemption in each grade (K-4). Table 3.5-Table 3.7 show the number of students, minimum, mean, maximum, and standard deviation of domain, comprehension, and overall scale scores in each grade. The OELPS tests are not vertically linked across all grades. Scale score summary by subgroup for each grade is also presented in Section 1 of Part II of the appendix.

Table 3.8, Table 3.9, and Figure 3.1 present the percentage of students by level in each domain test. The results indicate that most students have achieved performance Level 1 in reading, speaking, and writing in grades $1-10$. Most students scored at Level 5 in listening in grades $4-6$, but in grades $7-10$, most students scored at Level 1 . Students who scored at Level 4 had overall lower percentages in reading, speaking, and writing. Percentage of students by performance Level by subgroup for each grade is also presented in Section 2 of Part II of the appendix.

Table 3.10 and Figure 3.2 present the percentage of students by the overall proficiency level. The results show the majority of students who achieved the Emerging or Progressing category. The percentage of students who are proficient increases from kindergarten to grade 4, then consistently decreases until grade 9, and slightly increases after grade 9 . The percentage of students in the Emerging category is relatively stable until grade 6, increases until grade 9, and then consistently drops afterward. Section 3 of Part II of the appendix displays the overall proficiency level by subgroup for each grade.

Table 3.4 Summary of Domain Exemptions

| Grade | Total | Listening | Reading | Speaking | Writing |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{K}$ | 9,968 | $3(0.0 \%)$ | $2(0.2 \%)$ | $5(0.7 \%)$ | $2(0.8 \%)$ |
| $\mathbf{2}$ | 1,242 | $1(0.1 \%)$ | $0(0.0 \%)$ | $1(0.1 \%)$ | $0(0.0 \%)$ |
| $\mathbf{3}$ | 1,086 | $0(0.0 \%)$ | $1(0.1 \%)$ | $1(0.1 \%)$ | $1(0.1 \%)$ |
| $\mathbf{4}$ | 931 | $1(0.1 \%)$ | $1(0.1 \%)$ | $2(0.5 \%)$ | $1(0.1 \%)$ |
|  |  |  |  |  | * Other grades do not have domain exemptions. |

Table 3.5 Scale Score Summary—Listening and Reading

| Grade | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| K | 9,559 | 314 | 524.0 | 714 | 67.3 | 9,560 | 318 | 520.5 | 708 | 66.5 |
| 1 | 1,524 | 288 | 509.4 | 678 | 91.4 | 1,524 | 286 | 492.8 | 704 | 96.8 |
| 2 | 1,159 | 286 | 483.9 | 710 | 85.7 | 1,160 | 278 | 473.3 | 734 | 92.4 |
| 3 | 1,002 | 286 | 501.7 | 710 | 101.6 | 1,001 | 278 | 497.0 | 734 | 111.5 |
| 4 | 829 | 270 | 494.0 | 778 | 119.0 | 829 | 270 | 496.1 | 795 | 117.3 |
| 5 | 834 | 270 | 507.2 | 772 | 125.0 | 834 | 270 | 510.4 | 786 | 124.2 |
| 6 | 675 | 279 | 507.4 | 738 | 113.2 | 675 | 296 | 511.6 | 733 | 109.0 |
| 7 | 673 | 279 | 502.5 | 738 | 119.1 | 673 | 296 | 508.9 | 733 | 115.6 |
| 8 | 577 | 279 | 502.0 | 738 | 114.0 | 577 | 296 | 510.7 | 733 | 109.2 |
| 9 | 1,042 | 297 | 482.1 | 731 | 109.9 | 1,042 | 309 | 487.1 | 733 | 105.4 |
| 10 | 611 | 297 | 513.8 | 731 | 105.1 | 611 | 309 | 518.5 | 733 | 101.1 |
| 11 | 388 | 297 | 539.2 | 731 | 108.1 | 388 | 309 | 542.5 | 733 | 102.6 |
| 12 | 230 | 297 | 553.7 | 731 | 102.6 | 230 | 309 | 557.7 | 733 | 98.9 |
| * Domains with Exemption are excluded. <br> * Scale scores cannot be compared across grade bands. |  |  |  |  |  |  |  |  |  |  |

Table 3.6 Scale Score Summary—Speaking and Writing

| Grade | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| K | 9,557 | 339 | 517.4 | 711 | 82.2 | 9,560 | 347 | 486.5 | 684 | 62.5 |
| 1 | 1,524 | 310 | 491.5 | 669 | 102.6 | 1,524 | 283 | 489.0 | 698 | 98.0 |
| 2 | 1,159 | 292 | 464.9 | 703 | 104.4 | 1,160 | 276 | 469.0 | 737 | 94.8 |
| 3 | 1,001 | 292 | 481.3 | 703 | 121.4 | 1,001 | 276 | 494.6 | 737 | 113.5 |
| 4 | 828 | 270 | 504.0 | 786 | 151.3 | 829 | 268 | 496.0 | 797 | 125.7 |
| 5 | 834 | 270 | 516.2 | 782 | 151.1 | 834 | 268 | 511.0 | 791 | 130.6 |
| 6 | 675 | 296 | 518.6 | 732 | 125.7 | 675 | 281 | 507.6 | 741 | 115.4 |
| 7 | 673 | 296 | 507.4 | 732 | 132.5 | 673 | 281 | 504.7 | 741 | 121.5 |
| 8 | 577 | 296 | 510.0 | 732 | 128.5 | 577 | 281 | 506.2 | 741 | 116.3 |
| 9 | 1,042 | 332 | 494.2 | 722 | 119.1 | 1,042 | 315 | 487.9 | 732 | 105.5 |
| 10 | 611 | 332 | 526.9 | 722 | 109.8 | 611 | 315 | 519.0 | 732 | 101.2 |
| 11 | 388 | 332 | 555.6 | 722 | 110.0 | 388 | 315 | 543.6 | 732 | 104.7 |
| 12 | 230 | 332 | 570.9 | 722 | 101.8 | 230 | 315 | 555.8 | 732 | 100.5 |
| * Domains with Exemption are excluded. <br> * Scale scores cannot be compared across grade bands. |  |  |  |  |  |  |  |  |  |  |

Table 3.7 Scale Score Summary—Comprehension and Overall

| Grade | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| K | 9,562 | 3978 | 5394.1 | 6375 | 492.9 | 9,562 | 3646 | 5167.7 | 6763 | 529.5 |
| 1 | 1,524 | 3785 | 5199.7 | 6387 | 631.9 | 1,524 | 3364 | 5050.7 | 6629 | 778.4 |
| 2 | 1,160 | 3756 | 5040.9 | 6439 | 633.4 | 1,160 | 3326 | 4861.2 | 6880 | 752.8 |
| 3 | 1,002 | 3756 | 5166.0 | 6439 | 729.0 | 1,002 | 3326 | 5031.1 | 6880 | 900.7 |
| 4 | 830 | 3649 | 5056.0 | 6700 | 723.3 | 830 | 3237 | 5071.2 | 7401 | 1,027.2 |
| 5 | 834 | 3649 | 5144.2 | 6700 | 771.4 | 834 | 3237 | 5181.6 | 7352 | 1,060.4 |
| 6 | 675 | 3803 | 5181.1 | 6476 | 721.8 | 675 | 3388 | 5188.2 | 6974 | 921.7 |
| 7 | 673 | 3803 | 5151.3 | 6476 | 759.6 | 673 | 3388 | 5142.3 | 6974 | 974.7 |
| 8 | 577 | 3803 | 5155.0 | 6476 | 725.0 | 577 | 3388 | 5154.6 | 6974 | 932.3 |
| 9 | 1,042 | 3787 | 5012.1 | 6524 | 725.2 | 1,042 | 3605 | 4999.5 | 6923 | 878.2 |
| 10 | 611 | 3787 | 5228.9 | 6524 | 704.7 | 611 | 3605 | 5257.8 | 6923 | 826.4 |
| 11 | 388 | 3787 | 5384.3 | 6524 | 703.8 | 388 | 3605 | 5466.1 | 6923 | 843.1 |
| 12 | 230 | 3787 | 5502.2 | 6524 | 682.5 | 230 | 3605 | 5580.2 | 6923 | 795.6 |

* Scale scores cannot be compared across grade bands.

Table 3.8 Percentage of Students by Performance Level—Listening and Reading

| Grade | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| K | 9,962 | 4.0 | 18.3 | 14.6 | 56.2 | 2.7 | 4.1 | 9,963 | 4.0 | 21.6 | 18.3 | 46.5 | 4.3 | 5.2 |
| 1 | 1,610 | 5.3 | 23.4 | 6.7 | 31.6 | 12.7 | 20.2 | 1,610 | 5.3 | 46.8 | 11.4 | 17.1 | 8.0 | 11.4 |
| 2 | 1,234 | 6.1 | 22.7 | 9.8 | 24.1 | 19.2 | 18.2 | 1,235 | 6.1 | 45.5 | 8.0 | 21.4 | 8.7 | 10.3 |
| 3 | 1,076 | 6.9 | 22.0 | 12.4 | 20.0 | 19.7 | 19.1 | 1,075 | 6.9 | 45.7 | 13.6 | 16.9 | 6.3 | 10.6 |
| 4 | 910 | 8.9 | 26.4 | 6.7 | 11.3 | 17.0 | 29.7 | 910 | 8.9 | 38.2 | 8.1 | 13.2 | 9.9 | 21.6 |
| 5 | 912 | 8.6 | 27.5 | 6.4 | 9.1 | 19.8 | 28.6 | 912 | 8.6 | 37.9 | 12.2 | 14.1 | 7.3 | 19.8 |
| 6 | 771 | 12.5 | 23.7 | 7.4 | 11.7 | 16.5 | 28.3 | 771 | 12.5 | 35.3 | 5.6 | 18.8 | 7.7 | 20.2 |
| 7 | 829 | 18.8 | 31.1 | 6.9 | 13.3 | 7.2 | 22.7 | 829 | 18.8 | 39.4 | 7.8 | 12.9 | 7.2 | 13.8 |
| 8 | 682 | 15.4 | 32.0 | 9.7 | 15.0 | 8.5 | 19.5 | 682 | 15.4 | 42.2 | 8.9 | 19.8 | 5.1 | 8.5 |
| 9 | 1,273 | 18.1 | 39.3 | 8.7 | 14.3 | 5.9 | 13.7 | 1,273 | 18.1 | 45.9 | 10.8 | 14.2 | 4.1 | 6.8 |
| 10 | 676 | 9.6 | 29.7 | 11.7 | 19.1 | 10.8 | 19.1 | 676 | 9.6 | 38.0 | 15.2 | 21.0 | 6.4 | 9.8 |
| 11 | 414 | 6.3 | 23.7 | 10.1 | 20.8 | 9.2 | 30.0 | 414 | 6.3 | 30.2 | 16.9 | 23.7 | 8.0 | 15.0 |
| 12 | 249 | 7.6 | 16.1 | 8.8 | 25.3 | 10.0 | 32.1 | 249 | 7.6 | 21.7 | 15.7 | 30.9 | 8.8 | 15.3 |

* Level 0: Performance Not Determined.
* Domains with Exemption are excluded.

Table 3.9 Percentage of Students by Performance Level—Speaking and Writing

| Grade | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| K | 9,960 | 4.0 | 32.9 | 21.3 | 24.7 | 9.7 | 7.3 | 9,963 | 4.0 | 59.5 | 25.8 | 8.0 | 1.4 | 1.2 |
| 1 | 1,610 | 5.3 | 55.3 | 17.5 | 3.6 | 5.7 | 12.6 | 1,610 | 5.3 | 53.9 | 12.3 | 15.3 | 4.8 | 8.4 |
| 2 | 1,234 | 6.1 | 52.2 | 13.0 | 8.1 | 7.9 | 12.8 | 1,235 | 6.1 | 44.9 | 11.5 | 18.3 | 7.9 | 11.3 |
| 3 | 1,075 | 6.9 | 48.0 | 9.9 | 8.7 | 9.4 | 17.2 | 1,075 | 6.9 | 47.2 | 12.7 | 14.3 | 6.0 | 12.8 |
| 4 | 909 | 8.9 | 36.9 | 7.9 | 8.7 | 4.6 | 33.0 | 910 | 8.9 | 36.0 | 7.0 | 18.4 | 7.3 | 22.4 |
| 5 | 912 | 8.6 | 37.7 | 9.1 | 7.5 | 5.8 | 31.4 | 912 | 8.6 | 32.1 | 9.5 | 23.2 | 5.7 | 20.8 |
| 6 | 771 | 12.5 | 30.4 | 8.8 | 14.8 | 5.3 | 28.3 | 771 | 12.5 | 27.9 | 9.5 | 21.5 | 4.9 | 23.7 |
| 7 | 829 | 18.8 | 34.9 | 8.9 | 9.4 | 3.9 | 24.1 | 829 | 18.8 | 37.8 | 8.9 | 11.3 | 5.3 | 17.9 |
| 8 | 682 | 15.4 | 35.5 | 9.8 | 12.5 | 5.7 | 21.1 | 682 | 15.4 | 39.7 | 11.6 | 14.8 | 4.7 | 13.8 |
| 9 | 1,273 | 18.1 | 41.2 | 10.0 | 10.8 | 2.7 | 17.1 | 1,273 | 18.1 | 46.7 | 9.3 | 12.0 | 3.7 | 10.1 |
| 10 | 676 | 9.6 | 32.5 | 16.1 | 13.2 | 4.3 | 24.3 | 676 | 9.6 | 37.0 | 15.5 | 16.6 | 6.8 | 14.5 |
| 11 | 414 | 6.3 | 25.4 | 15.2 | 14.5 | 4.8 | 33.8 | 414 | 6.3 | 30.4 | 14.5 | 20.3 | 7.0 | 21.5 |
| 12 | 249 | 7.6 | 18.5 | 15.3 | 16.5 | 6.8 | 35.3 | 249 | 7.6 | 22.9 | 16.9 | 20.5 | 10.0 | 22.1 |

* Level 0: Performance Not Determined.
* Domains with Exemption are excluded.

Table 3.10 Percentage of Students by Overall Proficiency Level

| Grade | N | Emerging | Progressing | Proficient | Proficiency Not <br> Demonstrated |
| :---: | ---: | :---: | :---: | :---: | :---: |
| $\mathbf{K}$ | 9,965 | 28.6 | 64.8 | 2.5 | 4.0 |
| $\mathbf{1}$ | 1,610 | 29.4 | 54.3 | 10.9 | 5.3 |
| $\mathbf{2}$ | 1,235 | 32.3 | 47.3 | 14.3 | 6.1 |
| $\mathbf{3}$ | 1,076 | 34.3 | 43.9 | 15.0 | 6.9 |
| $\mathbf{4}$ | 911 | 32.9 | 30.4 | 27.8 | 8.9 |
| $\mathbf{5}$ | 912 | 33.4 | 33.6 | 24.5 | 8.6 |
| $\mathbf{6}$ | 771 | 29.4 | 33.3 | 24.8 | 12.5 |
| $\mathbf{7}$ | 682 | 36.9 | 24.5 | 19.8 | 18.8 |
| $\mathbf{8}$ | $\mathbf{4}$ | 39.9 | 31.4 | 13.3 | 15.4 |
| $\mathbf{9}$ | 676 | 45.8 | 25.9 | 10.1 | 18.1 |
| $\mathbf{1 0}$ | 314 | 39.2 | 36.1 | 15.1 | 9.6 |
| $\mathbf{1 1}$ | 249 | 22.5 | 40.3 | 21.5 | 6.3 |
| $\mathbf{1 2}$ |  |  | 47.4 | 22.5 | 7.6 |

Figure 3.1 Percentage of Students in Performance Levels


* Level 0: Performance Not Determined.
* Domains with Exemption are excluded.

Figure 3.2 Percentage of Students in Proficiency Levels


### 3.3 2019-2020 Testing Time for Online Tests

In the 2019-2020 OELPS tests, students who did not have domain exemption proceeded to Segments 2 and 3 (Step 2) and proceeded to Segment 4 (Step 3) if their raw scores met or exceeded the threshold score for Step 2 (Table 2.1). Therefore, students who exited at Step 3 took more items than those who stopped at Step 2. Table 3.11 summarizes testing time by end step in each grade/grade band for the OELPS tests. Testing time was computed based on page time for each item that a student spent on in Steps 1 and 2, plus 3 if a student proceeded to Step 3. Therefore, page time for TAs' responses, such as the time TAs spent on scoring the Step 2A items, was not included in the testing time summary. In addition, students who had any non-attempted or exempted domains or had proficiency not demonstrated are excluded. As expected, students who ended the test at Step 3 had longer testing times than those who ended at Step 2. In addition, upper grade tests had longer testing times than the lower grade tests due to the tests being longer and the items being more complex.

Table 3.11 Testing Time for the 2019-2020 Online Screener Tests

| Grade/Grade Band | End Step | N | N of Items | Testing Time (Minutes) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Min | P10 | P25 | P50 | Mean | P75 | P90 | Max | SD |
| K | Step 2 | 8,350 | 27 | 1.3 | 7.6 | 8.9 | 10.6 | 11.4 | 13.1 | 16.2 | 68.3 | 4.0 |
|  | Step 3 | 1,123 | 43 | 8.9 | 15.9 | 17.8 | 20.4 | 21.9 | 24.6 | 29.8 | 71.7 | 6.5 |
| 1 | Step 2 | 918 | 28 | 2.1 | 9.6 | 11.2 | 13.1 | 14.1 | 16.0 | 19.5 | 45.0 | 4.6 |
|  | Step 3 | 595 | 46 | 14.1 | 20.4 | 23.7 | 27.7 | 29.3 | 33.4 | 39.8 | 73.2 | 8.3 |
| 2-3 | Step 2 | 1,304 | 30 | 2.9 | 10.0 | 11.7 | 14.3 | 15.2 | 17.8 | 21.8 | 37.6 | 4.9 |
|  | Step 3 | 822 | 48 | 19.3 | 29.1 | 34.1 | 41.4 | 44.0 | 49.9 | 60.5 | 136.1 | 14.8 |
| 4-5 | Step 2 | 895 | 32 | 1.6 | 13.2 | 16.8 | 21.2 | 22.9 | 27.1 | 34.8 | 88.2 | 9.4 |
|  | Step 3 | 748 | 54 | 18.8 | 32.7 | 38.0 | 46.0 | 49.4 | 57.6 | 71.0 | 118.2 | 15.5 |
| 6-8 | Step 2 | 1,038 | 31 | 2.1 | 12.6 | 17.5 | 24.2 | 26.3 | 31.9 | 42.0 | 140.7 | 13.1 |
|  | Step 3 | 873 | 54 | 20.9 | 34.8 | 40.9 | 50.0 | 52.9 | 60.9 | 75.0 | 182.1 | 16.9 |
| 9-12 | Step 2 | 1,408 | 32 | 1.1 | 16.8 | 22.1 | 29.6 | 32.7 | 39.3 | 52.3 | 159.3 | 16.0 |
|  | Step 3 | 838 | 54 | 21.5 | 36.3 | 43.5 | 54.7 | 57.6 | 66.9 | 82.5 | 159.1 | 19.7 |

## Chapter 4. Reliability

In the same procedure as the summative assessment described in Chapter 6 in Part I of the technical report, the screener reliability for screener tests is assessed using

- marginal standard error of measurement (MSEM);
- marginal reliability;
- conditional standard error of measurement (CSEM); and
- classification accuracy and consistency.

In addition, since OELPS adopted local TAs for handscoring in the 2019-2020 administration, inter-rater analysis is not conducted. The results for the 2019-2020 OELPS assessment are illustrated in this chapter and in Section 4 of Part II of the appendix:

- Section 4. Screener Assessment - Conditional Standard Error of Measurement (CSEM) - Figures S4.1-S4.13 show the CSEM plots for each domain, overall, and comprehension scores. If a test applies to multiple grades, the CSEM plots are broken down by grade. In 2019-2020 OELPS tests, students can end the test at Step 2 or Step 3. The CSEM plots use different colors to differentiate the students who ended the test at different steps.


### 4.1 Marginal Standard Error of Measurement

As described in Part I, the MSEM is a way to examine score reliability. The ratio of MSEM and the standard deviation of scale scores can also indicate the measure errors, and the analysis for the ratio is displayed in Figure 4.1.

Figure 4.1 Ratio of Marginal Standard Error of Measurement to Standard Deviation of Estimated Scale Scores by Grade and Domain


* Domains with Exemption are excluded.


### 4.2 Marginal Reliability

Table 4.1 and Figure 4.2 show the marginal reliability by grade. The marginal reliabilities by domain were obtained using the domain scores based on the MIRT models, and the overall/comprehension marginal reliabilities were obtained using the overall/comprehension scores based on the bi-factor models. Kindergarten has lower marginal reliability than the other grades. Writing has lower marginal reliability at kindergarten and high school grades but has higher reliability from grades $1-5$. Listening has relatively lower reliability than the other domains in grades $1-5$. In addition, Section 4 of Part II of the appendix displays CSEM plots by grade. Groups with fewer than 50 students were excluded from the plots of marginal reliability by groups.

Table 4.1 Marginal Reliability

| Grade | N | Listening | Reading | Speaking | Writing | Comprehension | Overall |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{K}$ | 9,557 | .75 | .72 | .78 | .70 | .67 | .74 |
| $\mathbf{1}$ | 1,524 | .81 | .88 | .85 | .87 | .74 | .87 |
| $\mathbf{2}$ | 1,159 | .84 | .90 | .88 | .90 | .79 | .90 |
| $\mathbf{3}$ | 1,001 | .86 | .92 | .90 | .93 | .82 | .93 |
| $\mathbf{4}$ | 828 | .91 | .93 | .93 | .93 | .86 | .94 |
| $\mathbf{5}$ | 834 | .91 | .93 | .93 | .94 | .87 | .94 |
| $\mathbf{6}$ | 675 | .92 | .91 | .92 | .92 | .87 | .93 |
| $\mathbf{7}$ | 673 | .93 | .92 | .93 | .93 | .88 | .94 |
| $\mathbf{8}$ | 577 | .93 | .92 | .93 | .92 | .88 | .94 |
| $\mathbf{9}$ | 1,042 | .93 | .92 | .92 | .89 | .90 | .93 |
| $\mathbf{1 0}$ | 611 | .92 | .91 | .91 | .88 | .89 | .92 |
| $\mathbf{1 1}$ | 388 | .92 | .91 | .91 | .89 | .88 | .92 |
| $\mathbf{1 2}$ | 230 | .91 | .90 | .90 | .88 | .86 | .91 |
|  |  | * Domains with Exemption are excluded. |  |  |  |  |  |

Figure 4.2 Marginal Reliability


* Domains with Exemption are excluded.


### 4.3 Classification Accuracy and Consistency

As described in Section 6.4 in Part I, Classification accuracy (CA) analysis investigates how precisely students are classified into each performance level. Classification consistency (CC) analysis investigates how consistently students are classified into each performance level across two independent administrations of equivalent forms. Since obtaining test scores from two independent administrations is not feasible due to issues such as logistics and cost constraints, the CC index is computed with the assumption that the same test is independently administered twice to the same group of students. Table 4.2 presents overall classification accuracy and consistency by domain. Classification consistency rates can be lower than classification accuracy because consistency is based on two tests with measurement errors, while accuracy is based on one test with a measurement error and the true score.

Table 4.3 and Figure 4.3 show classification accuracy, and Table 4.4 and Figure 4.4 display the classification consistency for each cut score. Across the four performance cut scores, the classification accuracy indices are all above 0.8 , denoting that the degree to which we can reliably
differentiate students between adjacent performance levels is typically above 0.8 . In terms of classification consistency, the indices are all above 0.7 in all cuts and all grades. The accuracy indices in grades 4 and higher are above 0.9 for all domains. Table 4.5 and Figure 4.5 display the classification accuracy and consistency for overall proficiency levels. The plot shows that all the accuracy and consistency indices are above 0.8 . The accuracy indices for cut 1 are lower than those for cut 2 in kindergarten and are comparable than those for cut 2 in the other grades.

Table 4.2 OELPS Overall Classification Accuracy and Consistency for Domain Performance Levels by Grade and Domain

| Grade | Accuracy |  |  |  | Consistency |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Listening | Reading | Speaking | Writing | Listening | Reading | Speaking | Writing |
| K | . 69 | . 60 | . 59 | . 72 | . 57 | . 48 | . 51 | . 63 |
| 1 | . 63 | . 72 | . 71 | .76 | . 53 | . 65 | . 66 | . 69 |
| 2 | . 63 | . 75 | .71 | . 76 | . 53 | . 68 | . 66 | . 69 |
| 3 | . 65 | . 76 | . 73 | . 78 | . 55 | . 70 | . 68 | . 72 |
| 4 | . 74 | . 78 | . 80 | . 79 | . 66 | . 72 | . 76 | . 73 |
| 5 | . 76 | . 78 | . 79 | . 79 | . 68 | . 72 | . 74 | . 72 |
| 6 | . 77 | . 77 | . 77 | . 77 | . 69 | . 70 | . 71 | . 69 |
| 7 | . 80 | . 79 | . 81 | . 80 | . 73 | . 73 | . 75 | . 74 |
| 8 | . 77 | . 79 | . 78 | . 79 | . 69 | . 73 | . 72 | . 72 |
| 9 | . 80 | . 82 | . 81 | . 78 | . 74 | . 76 | . 75 | . 72 |
| 10 | . 75 | . 76 | . 76 | . 71 | . 67 | . 69 | . 68 | . 64 |
| 11 | . 76 | . 73 | . 75 | . 71 | . 68 | . 65 | . 68 | . 63 |
| 12 | . 75 | . 70 | . 73 | . 67 | . 66 | . 62 | . 65 | . 59 |

Table 4.3 Classification Accuracy for Each Cut

| Grade | Listening |  |  |  | Reading |  |  |  | Speaking |  |  |  | Writing |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 |
| K | . 91 | . 85 | . 92 | . 96 | . 88 | . 82 | . 88 | . 94 | . 87 | . 84 | . 89 | . 92 | . 81 | . 93 | . 98 | . 98 |
| 1 | . 92 | . 90 | . 86 | . 88 | . 90 | . 92 | . 93 | . 94 | . 88 | . 89 | . 90 | . 91 | . 93 | . 92 | . 93 | . 94 |
| 2 | . 91 | . 92 | . 88 | . 89 | . 93 | . 92 | . 93 | . 95 | . 90 | . 90 | . 91 | . 92 | . 92 | . 92 | . 94 | . 96 |
| 3 | . 91 | . 94 | . 89 | . 89 | . 94 | . 92 | . 93 | . 95 | . 93 | . 91 | . 91 | . 91 | . 94 | . 94 | . 94 | . 95 |
| 4 | . 93 | . 95 | . 93 | . 92 | . 95 | . 95 | . 94 | . 94 | . 94 | . 94 | . 94 | . 95 | . 95 | . 95 | . 94 | . 94 |
| 5 | . 95 | . 95 | . 92 | . 92 | . 94 | . 94 | . 94 | . 94 | . 94 | . 93 | . 94 | . 93 | . 94 | . 94 | . 94 | . 94 |
| 6 | . 94 | . 95 | . 94 | . 93 | . 94 | . 95 | . 93 | . 94 | . 95 | . 93 | . 93 | . 94 | . 92 | . 94 | . 95 | . 94 |
| 7 | . 95 | . 96 | . 94 | . 93 | . 96 | . 95 | . 93 | . 93 | . 95 | . 94 | . 95 | . 94 | . 94 | . 95 | . 95 | . 94 |
| 8 | . 94 | . 95 | . 94 | . 93 | . 95 | . 95 | . 93 | . 94 | . 94 | . 93 | . 94 | . 94 | . 94 | . 94 | . 94 | . 94 |
| 9 | . 94 | . 95 | . 95 | . 95 | . 95 | . 95 | . 95 | . 96 | . 94 | . 95 | . 95 | . 95 | . 92 | . 94 | . 95 | . 95 |
| 10 | . 93 | . 94 | . 94 | . 93 | . 93 | . 93 | . 94 | . 94 | . 93 | . 93 | . 94 | . 93 | . 90 | . 92 | . 94 | . 93 |
| 11 | . 95 | . 94 | . 93 | . 92 | . 93 | . 93 | . 92 | . 92 | . 93 | . 93 | . 94 | . 93 | . 91 | . 91 | . 93 | . 92 |
| 12 | . 96 | . 94 | . 92 | . 91 | . 94 | . 91 | . 91 | . 91 | . 93 | . 92 | . 93 | . 92 | . 91 | . 91 | . 91 | . 91 |

* Cuts 1 to 4 fall between performance Levels 1 and 2, 2 and 3,3 and 4, 4 and 5 , respectively.

Figure 4.3 Classification Accuracy


Speaking
Writing



$$
\circ \text { Overall } \circ \text { Cut1 } \circ \text { Cut2 } \circ \text { Cut3 } \circ \text { Cut } 4
$$

* Domains with Exemption are excluded.
* Cuts 1 to 4 fall between performance Levels 1 and 2, 2 and 3,3 and 4, 4 and 5, respectively.

Table 4.4 Classification Consistency for Each Cut

| Grade | Listening |  |  |  | Reading |  |  |  | Speaking |  |  |  | Writing |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 | Cut 1 | Cut 2 | Cut 3 | Cut 4 |
| K | . 87 | . 78 | . 88 | . 94 | . 83 | . 75 | . 83 | . 91 | . 81 | . 79 | . 85 | . 89 | . 74 | . 89 | . 97 | . 98 |
| 1 | . 88 | . 86 | . 81 | . 84 | . 86 | . 88 | . 90 | . 91 | . 84 | . 85 | . 86 | . 88 | . 89 | . 89 | . 90 | . 92 |
| 2 | . 87 | . 88 | . 83 | . 85 | . 90 | . 89 | . 90 | . 92 | . 86 | . 86 | . 87 | . 89 | . 89 | . 89 | . 91 | . 94 |
| 3 | . 88 | . 90 | . 85 | . 85 | . 91 | . 90 | . 91 | . 92 | . 90 | . 88 | . 88 | . 88 | . 91 | . 91 | . 92 | . 93 |
| 4 | . 90 | . 92 | . 90 | . 88 | . 92 | . 92 | . 91 | . 91 | . 92 | . 91 | . 92 | . 92 | . 92 | . 93 | . 92 | . 91 |
| 5 | . 92 | . 92 | . 89 | . 89 | . 92 | . 92 | . 92 | . 92 | . 92 | . 91 | . 91 | . 90 | . 92 | . 92 | . 92 | . 92 |
| 6 | . 91 | . 93 | . 92 | . 90 | . 91 | . 92 | . 90 | . 91 | . 92 | . 90 | . 90 | . 91 | . 88 | . 91 | . 93 | . 92 |
| 7 | . 93 | . 94 | . 92 | . 90 | . 94 | . 93 | . 90 | . 90 | . 93 | . 92 | . 93 | . 92 | . 92 | . 93 | . 92 | . 91 |
| 8 | . 91 | . 93 | . 91 | . 90 | . 92 | . 92 | . 91 | . 92 | . 92 | . 91 | . 91 | . 92 | . 91 | . 92 | . 92 | . 92 |
| 9 | . 91 | . 93 | . 93 | . 93 | . 92 | . 92 | . 94 | . 94 | . 91 | . 93 | . 93 | . 93 | . 88 | . 91 | . 93 | . 94 |
| 10 | . 91 | . 91 | . 91 | . 90 | . 90 | . 90 | . 91 | . 92 | . 90 | . 90 | . 92 | . 90 | . 86 | . 89 | . 91 | . 91 |
| 11 | . 93 | . 92 | . 90 | . 89 | . 90 | . 89 | . 89 | . 89 | . 90 | . 90 | . 91 | . 89 | . 88 | . 88 | . 90 | . 89 |
| 12 | . 94 | . 91 | . 89 | . 87 | . 91 | . 88 | . 87 | . 88 | . 91 | . 89 | . 90 | . 88 | . 87 | . 87 | . 88 | . 87 |

* Cuts 1 to 4 fall between performance Levels 1 and 2, 2 and 3, 3 and 4, 4 and 5, respectively.

Figure 4.4 Classification Consistency


* Domains with Exemption are excluded.
* Cuts 1 to 4 fall between performance Levels 1 and 2, 2 and 3, 3 and 4, 4 and 5, respectively.

Table 4.5 Screener Classification for Proficiency Levels

| Grade | Accuracy |  |  | Consistency |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Overall | Cut 1 | Cut 2 | Overall | Cut 1 | Cut 2 |
| K | . 86 | . 88 | . 98 | . 81 | . 83 | . 98 |
| 1 | . 85 | . 91 | . 94 | . 80 | . 87 | . 92 |
| 2 | . 86 | . 92 | . 94 | . 82 | . 89 | . 93 |
| 3 | . 88 | . 94 | . 94 | . 84 | . 91 | . 93 |
| 4 | . 89 | . 95 | . 94 | . 85 | . 93 | . 92 |
| 5 | . 90 | . 95 | . 94 | . 86 | . 94 | . 92 |
| 6 | . 90 | . 95 | . 95 | . 86 | . 93 | . 93 |
| 7 | . 89 | . 96 | . 93 | . 86 | . 94 | . 92 |
| 8 | . 89 | . 94 | . 94 | . 85 | . 92 | . 92 |
| 9 | . 90 | . 95 | . 96 | . 87 | . 93 | . 94 |
| 10 | . 87 | . 93 | . 94 | . 83 | . 91 | . 92 |
| 11 | . 86 | . 94 | . 93 | . 82 | . 92 | . 90 |
| 12 | . 86 | . 94 | . 92 | . 81 | . 92 | . 89 |

Figure 4.5 Proficiency Classification

Classification Accuracy


Classification Consistency

Overall ○ Cut1 ○ Cut2

* Cut 1: Cut between Emerging and Progressing; Cut 2: Cut between Progressing and Proficient.


## Chapter 5. Validity

Discussions on the test development, form construction, scaling, equating, and standard setting can be found in the related documents from ELPA21.

Since the items and the item parameters in the screener tests are from the item pool for summative tests, and the purpose of the screener is for the prediction of students' English proficiency levels, instead of evaluating the validity aspects as those for the summative tests, we evaluate the relationships between the screener and summative tests and summarize the student progress from the time they took screener tests to the time they took summative tests. The statistical methods and the results are presented in this chapter and Sections 5-6 of Part II of the appendix:

- Section 5. Student Progress from Screener to Summative-Scatter Plots of Scale Score Change
- Figures S5.1-S5.6 display the scatter plot of scale score change from screener to summative for each grade band.
- Section 6. Student Progress from Screener to Summative-Comparison of Scale Scores - Tables S6.1-S6.6 summarize the comparisons of scale score summary statistics between screener and summative for each domain, overall, and comprehension scores.


### 5.1 Correlations Between Summative and Screener Tests

Students who took the ELPA21 screener and were classified as not proficient would in general be expected to also have been administered the ELPA21 summative assessment. The test questions on the screener and summative assessments are drawn from the same item pools and assess the same ELP standards adopted by the state of Ohio. We identified the students who completed both the screener and summative assessments and compared their performance across the two occasions.

The correlation between the scale scores from the summative and screener tests is assessed using Pearson correlations. The correlation between the performance levels from both tests is assessed using Goodman and Kruskal's Gamma correlation (Goodman \& Kruskal, 1954). The gamma correlation, or gamma statistics, is for ordinal level data with a small number of response categories. It is designed to determine how effectively a researcher can use the information about an individual measured on one variable to predict the measure of the individual on another variable. The correlation results are presented in Table 5.1 and Table 5.2.

Table 5.1 shows the Pearson correlation between the screener and the summative tests in domain and composite scores. Correlations of all types of scores are the lowest in the kindergarten test, followed by the grade 1 test; the correlations are above 0.75 in each domain and composite scale scores in grade 2 and above, except for grades 4-5 reading and comprehension scores. The speaking tests have relatively higher correlations than the other three domains in kindergarten and grade 1 but have lower correlations in middle and high school.

Table 5.2 shows the Gamma correlations between domain performance levels and test proficiency levels. Similar to the correlations between scale scores presented in Table 5.1, kindergarten has
the lowest correlations in all domain performance levels and overall proficiency levels. For grade 2 and above, the correlations are about 0.8 except for the speaking domain. In addition, the correlations between proficiency levels are overall higher than those between domain performance levels. This is because there are three levels in overall proficiency while there are five levels in domain performance. These correlations show predictive validity between the two OELP tests because they were given to the same students at different times.

Table 5.1 Pearson Correlations Between Scale Scores for the Screener and Summative Assessments

| Grade/Grade Band | Listening |  | Reading |  | Speaking |  | Writing |  | Comprehension |  | Overall |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Corr | N | Corr | N | Corr | N | Corr | N | Corr | N | Corr |
| K | 8,558 | . 57 | 8,488 | . 55 | 8,336 | . 65 | 8,474 | . 47 | 8,588 | . 50 | 8,613 | . 65 |
| 1 | 1,140 | . 74 | 1,134 | . 70 | 1,110 | . 77 | 1,117 | . 72 | 1,147 | . 72 | 1,150 | . 79 |
| 2-3 | 1,588 | . 78 | 1,571 | . 80 | 1,527 | . 79 | 1,559 | 81 | 1,593 | . 78 | 1,601 | . 83 |
| 4-5 | 1,036 | . 79 | 1,022 | . 74 | 1,001 | . 77 | 1,014 | . 81 | 1,042 | . 74 | 1,050 | . 81 |
| 6-8 | 1,254 | . 83 | 1,243 | . 78 | 1,206 | . 75 | 1,236 | . 81 | 1,263 | . 80 | 1,272 | . 84 |
| 9-12 | 1,619 | . 83 | 1,619 | . 80 | 1,570 | . 75 | 1,597 | . 81 | 1,636 | . 80 | 1,655 | . 84 |

* Results are based on subset of students with results for both the screener and summative assessments.

Table 5.2 Gamma Correlations Between Domain/Proficiency Classifications for the Screener and Summative Assessments

| Grade/Grade Band | Listening |  | Reading |  | Speaking |  | Writing |  | Overall Proficiency |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | Corr | N | Corr | N | Corr | N | Corr | N | Corr |
| K | 8,558 | . 66 | 8,488 | . 59 | 8,336 | . 63 | 8,474 | . 54 | 8,613 | . 83 |
| 1 | 1,140 | . 77 | 1,134 | . 76 | 1,110 | . 70 | 1,117 | . 80 | 1,150 | . 92 |
| 2-3 | 1,588 | . 81 | 1,571 | . 86 | 1,527 | . 75 | 1,559 | . 86 | 1,601 | . 92 |
| 4-5 | 1,036 | . 83 | 1,022 | . 83 | 1,001 | . 77 | 1,014 | . 90 | 1,050 | . 93 |
| 6-8 | 1,254 | . 87 | 1,243 | . 86 | 1,206 | . 74 | 1,236 | . 90 | 1,272 | . 97 |
| 9-12 | 1,619 | . 89 | 1,619 | . 89 | 1,570 | . 78 | 1,597 | . 90 | 1,655 | . 95 |

### 5.2 Student Progress from Screener to Summative

Student progress from the time they took screener tests to the time they took summative tests is evaluated by the changes in scale scores and performance levels. The major confounding factor in this result is the measurement error in both assessments. Given the acceptable marginal reliability indices described in Chapter 6 of the technical report Part I and Chapter 4 of the technical report Part II, we can still see the trend of student progress.

Figure 5.1 and Figure 5.2 show the growth of the average domain scores and composite scores, respectively. The average scale scores in the summative assessment are, in general, higher than those in the screener assessment. In addition, Section 5 of the appendix Part II presents a scatter plot of scale score changes from screener to summative assessments for each grade or grade band, and Section 6 summarizes a comparison of scale scores between screener and summative assessments.

Figure 5.1 Average Domain Scale Score Progress


Figure 5.2 Average Overall and Comprehension Scale Score Progress


Figure 5.3 and Figure 5.4 display the percentage of students in each domain performance level and overall proficiency level, respectively. In each pair of bars, the left bar is from the screener test and the right bar is from the corresponding summative test. The plots indicate that more students are in higher domain performance levels and overall proficiency levels in the summative tests.

Figure 5.3 Percentage of Domain Performance Level from Screener to Summative





Figure 5.4 Percentages of Overall Proficiency from Screener to Summative


## Chapter 6. Reporting

As with the summative tests, the screener test results are available in the Online Reporting System (ORS). The detailed introduction for the ORS can be found in Chapter 8 in Part I of the technical report. Figure 6.1 and Figure 6.2 show a sample page of an online score report and the individual student report for the 2019-2020 OELPS, respectively.

Figure 6.1 ORS Page for State Overall Performance


- Now viewing: Scores for students who were mine when they tested during the selected administration


## Home Page Dashboard

Select Test and Year
Test: $\quad$ OELPS
Administration: $2019-2020 ~ \vee$

Scores for students who were mine at the end of the selected administration
Scores for my current students

- Scores for students who were mine when they tested during the selected administration

Select
Ohio Department of Education v

Select a district and then click on a grade and subject to view more information.
Overall Performance on the OELPS test, by Grade: Ohio Department of Education, 2019-2020

## OELPS



[^8]Ohio Department of Education
Report Generated: 7/15/2020 12:09:14 PM EDT
The number of students tested includes only those students with valid scores.
*No valid scores for this grade and subject

Figure 6.2 Individual Student Report

| ORS | Online Re | orting System |  |  | Logged in as: Demo User | Contact Us | Logout |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | hio | Department <br> of Education |  |  |  |  |  |
|  |  | 团 Score Reports | (1) Reports \& Files ${ }^{\text {r }}$ | 芧 State at a Glance |  |  |  |
|  |  |  |  |  | age: (3) Help \| B Print $^{\text {P }}$ |  |  |
|  |  | P Now viewing Scor | or students who were mine w | ey tested during the selected administration Change your Selection |  |  |  |

Individual Student Report
How did my student perform on the OELPS?
Test: Kindergarten OELPS
Year: 2019-2020
Name: Demo Student 1

| Overall Performance on the Kindergarten OELPS Test: Demo Student 1, 2019-2020 |  | Date Tested |
| :--- | :--- | :--- | :--- |
| Name SSID Proficiency Status 9/5/2019 <br> Demo Student 1 YQ99999999 Progressing  |  |  |

Information on Standard Error of Measurement
Proficiency Determination
Proficient - Students are Proficient when they demonstrate a level of English language skill necessary to independently produce, interpret, collaborate on, and succeed in grade-level academic tasks in English. This is indicated on the OELPS by earning Levels 4 or higher in all domains. Proficient students are not identified as English Learners and do not receive English language development services.
Progressing - Students are Progressing when, with support, they are approaching a level of English language skill necessary to produce, interpret, and collaborate on grade-level academic tasks in English. This is indicated on the OELPS by scoring at least one domain score above Level 2 and at least one domain score below Level 4. These students are eligible for English language development services.
Emerging - Students are Emerging when they have not yet reached a level of English language skill necessary to produce, interpret, and collaborate on grade-level content-related academic tasks in English. This is indicated on the OELPS by scoring a Level 1 or Level 2 in listening, reading, writing, and speaking. These students are eligible for English language development services.
Proficiency Not Demonstrated - Students receive a status of Proficiency Not Demonstrated when testing is stopped due to the student not participating. State policy determines whether or not a non-participant is eligible for English language development services.

Performance on the Kindergarten OELPS Test, by Domain: Demo Student 1, 2019-2020

| Domain | Performanc Level |  | Domain Description |
| :---: | :---: | :---: | :---: |
| Listening | $3$ | Intermediate | When listening, the student at Level 3 is working on: responding to conversations and identifying key words and phrases from read-alouds and oral presentations; answering questions about the meanings of words and phrases; making inferences and comparisons; responding to yes/no and wh- questions; comprehending details and following longer directions. |
| Reading | $3$ | Intermediate | When reading grade-appropriate text, the student at Level 3 is working on: identifying frequently used words and phrases; responding to questions about key details from read-alouds of texts and dialogues; responding to questions about familiar topics; answering questions to help determine the meaning of some words and phrases in read-alouds. |
| Speaking | $3$ | Intermediate | When speaking, the student at Level 3 is working on: responding to conversations, questions and commands by describing details and actions using nouns, verbs, and prepositions; communicating information and expressing an opinion about a familiar topic; making inferences to answer questions; retelling and sequencing an oral presentation. |
| Writing | (2) | When writing, the student at Level 2 is working on: recognizing and using frequently occurring nouns and Early Intermediateverbs in writing; writing and completing words by filling in a missing letter; expressing an opinion about a topic in writing and giving a reason for that opinion; responding to simple questions about familiar topics. |  |

[^9]
## References

Goodman, L. \& Kruskal, W. (1954). Measures of association for cross classifications. Journal of the American Statistical Association, 49, 732-764.

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# Section 1: Screener Assessment - Scale Score Summary 

* Domains with Exemption are excluded.
* The statistics are suppressed when the N count is fewer than 10.

Table S1.1: Screener Scale Score Summary by Subgroup - Kindergarten

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 9,559 | 314 | 524.0 | 714 | 67.3 | 9,560 | 318 | 520.5 | 708 | 66.5 |
| Gender | Female | 4,330 | 314 | 526.7 | 714 | 68.4 | 4,332 | 318 | 523.8 | 708 | 66.7 |
|  | Male | 4,464 | 314 | 521.6 | 714 | 66.5 | 4,462 | 318 | 517.5 | 708 | 66.6 |
|  | Missing | 765 | 314 | 522.4 | 714 | 65.5 | 766 | 318 | 519.6 | 708 | 63.9 |
| Ethnicity | American Indian or Alaskan Native | 24 | 363 | 506.2 | 630 | 75.2 | 24 | 365 | 508.2 | 633 | 68.6 |
|  | Asian | 2,429 | 314 | 539.4 | 714 | 72.0 | 2,428 | 318 | 535.2 | 708 | 72.0 |
|  | Black or African American | 1,729 | 314 | 526.6 | 714 | 62.4 | 1,729 | 318 | 522.4 | 708 | 62.3 |
|  | Hispanic or Latino | 2,540 | 314 | 506.0 | 714 | 63.5 | 2,541 | 318 | 503.6 | 708 | 62.1 |
|  | Native Hawaiian or Other Pacific Islander | 44 | 370 | 535.2 | 658 | 59.8 | 44 | 405 | 536.7 | 656 | 55.3 |
|  | Two or More Races | 947 | 314 | 515.4 | 714 | 66.4 | 947 | 318 | 512.3 | 708 | 64.8 |
|  | White | 1,619 | 314 | 529.3 | 714 | 66.2 | 1,620 | 318 | 525.6 | 708 | 65.6 |
|  | Other/Unknown | 227 | 382 | 536.5 | 714 | 53.9 | 227 | 367 | 534.3 | 708 | 52.8 |
| Other | Gifted | 23 | 381 | 554.8 | 695 | 97.0 | 23 | 412 | 555.7 | 690 | 87.4 |
|  | IEP | 119 | 314 | 484.6 | 592 | 65.2 | 120 | 318 | 484.0 | 597 | 64.3 |
|  | Migrant | 9 |  |  |  |  | 9 |  |  |  |  |
| Primary Disability | Autism | 32 | 343 | 467.3 | 560 | 58.9 | 32 | 336 | 464.2 | 567 | 62.2 |
|  | Developmental delay | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 2 |  |  |  |  | 3 |  |  |  |  |
|  | Intellectual Disability | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Multiple disabilities | 6 |  |  |  |  | 6 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  |  | Reading |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment |  | 6 |  |  |  |  |  | 6 |  |  |  |  |
|  | Specific learning disability |  | 7 |  |  |  |  |  | 7 |  |  |  |  |
|  | Speech or language impairment |  | 63 | 314 | 504.7 | 592 | 59.8 |  | 63 | 318 | 504.7 | 597 | 55.3 |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.1: Screener Scale Score Summary by Subgroup - Kindergarten (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 9,557 | 339 | 517.4 | 711 | 82.2 | 9,560 | 347 | 486.5 | 684 | 62.5 |
| Gender | Female | 4,330 | 339 | 523.1 | 711 | 82.3 | 4,332 | 347 | 487.0 | 684 | 62.1 |
|  | Male | 4,462 | 339 | 512.5 | 711 | 82.2 | 4,462 | 347 | 485.6 | 684 | 63.6 |
|  | Missing | 765 | 339 | 513.9 | 711 | 80.1 | 766 | 347 | 488.7 | 684 | 58.8 |
| Ethnicity | American Indian or Alaskan Native | 24 | 368 | 515.8 | 669 | 77.6 | 24 | 365 | 485.4 | 640 | 65.4 |
|  | Asian | 2,428 | 339 | 534.4 | 711 | 84.0 | 2,428 | 347 | 506.9 | 684 | 73.3 |
|  | Black or African American | 1,729 | 339 | 525.6 | 711 | 72.4 | 1,729 | 347 | 485.4 | 684 | 60.2 |
|  | Hispanic or Latino | 2,539 | 339 | 492.4 | 711 | 81.3 | 2,541 | 347 | 469.4 | 684 | 49.6 |
|  | Native Hawaiian or Other Pacific Islander | 44 | 365 | 529.1 | 687 | 74.1 | 44 | 421 | 488.6 | 606 | 45.7 |
|  | Two or More Races | 947 | 339 | 505.4 | 711 | 83.4 | 947 | 347 | 476.3 | 684 | 58.9 |
|  | White | 1,619 | 339 | 527.3 | 711 | 81.6 | 1,620 | 347 | 488.6 | 684 | 60.1 |
|  | Other/Unknown | 227 | 367 | 530.3 | 711 | 73.8 | 227 | 396 | 494.8 | 684 | 53.2 |
| Other | Gifted | 23 | 450 | 566.7 | 698 | 75.1 | 23 | 379 | 572.3 | 674 | 74.2 |
|  | IEP | 119 | 339 | 468.0 | 636 | 76.4 | 120 | 347 | 456.8 | 592 | 49.6 |
|  | Migrant | 9 |  |  |  |  | 9 |  |  |  |  |
| Primary Disability | Autism | 32 | 348 | 439.3 | 596 | 69.8 | 32 | 356 | 434.9 | 555 | 46.6 |
|  | Developmental delay | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 2 |  |  |  |  | 3 |  |  |  |  |
|  | Intellectual Disability | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Multiple disabilities | 6 |  |  |  |  | 6 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  |  | Writing |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment |  | 6 |  |  |  |  |  | 6 |  |  |  |  |
|  | Specific learning disability |  | 7 |  |  |  |  |  | 7 |  |  |  |  |
|  | Speech or language impairment |  | 63 | 339 | 490.5 | 616 | 69.5 |  | 63 | 347 | 468.3 | 592 | 49.8 |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.1: Screener Scale Score Summary by Subgroup - Kindergarten (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 9,562 | 3978 | 5394.1 | 6375 | 492.9 | 9,562 | 3646 | 5167.7 | 6763 | 529.5 |
| Gender | Female | 4,332 | 3978 | 5416.0 | 6375 | 496.9 | 4,332 | 3646 | 5193.0 | 6763 | 530.1 |
|  | Male | 4,464 | 3978 | 5374.0 | 6375 | 489.1 | 4,464 | 3646 | 5144.4 | 6763 | 532.2 |
|  | Missing | 766 | 3978 | 5387.0 | 6375 | 488.4 | 766 | 3646 | 5160.5 | 6763 | 504.0 |
| Ethnicity | American Indian or Alaskan Native | 24 | 4216 | 5258.6 | 6178 | 563.0 | 24 | 4033 | 5106.3 | 6114 | 522.4 |
|  | Asian | 2,429 | 3978 | 5474.2 | 6375 | 499.4 | 2,429 | 3646 | 5309.5 | 6763 | 580.5 |
|  | Black or African American | 1,729 | 3978 | 5414.6 | 6375 | 473.2 | 1,729 | 3646 | 5193.9 | 6763 | 479.0 |
|  | Hispanic or Latino | 2,542 | 3978 | 5289.3 | 6375 | 492.5 | 2,542 | 3646 | 5006.1 | 6763 | 485.1 |
|  | Native Hawaiian or Other Pacific Islander | 44 | 4359 | 5532.3 | 6375 | 464.2 | 44 | 4279 | 5252.9 | 6201 | 428.0 |
|  | Two or More Races | 947 | 3978 | 5346.9 | 6375 | 494.1 | 947 | 3646 | 5084.9 | 6763 | 517.5 |
|  | White | 1,620 | 3978 | 5427.0 | 6375 | 482.9 | 1,620 | 3646 | 5213.8 | 6763 | 516.4 |
|  | Other/Unknown | 227 | 4234 | 5501.7 | 6375 | 406.0 | 227 | 4197 | 5267.4 | 6763 | 417.5 |
| Other | Gifted | 23 | 4279 | 5484.6 | 6375 | 653.1 | 23 | 4462 | 5600.0 | 6591 | 637.0 |
|  | IEP | 120 | 3978 | 5138.6 | 6009 | 510.5 | 120 | 3646 | 4841.9 | 5695 | 489.3 |
|  | Migrant | 9 |  |  |  |  | 9 |  |  |  |  |
| Primary Disability | Autism | 32 | 4120 | 5019.3 | 6009 | 497.5 | 32 | 3748 | 4650.0 | 5322 | 444.7 |
|  | Developmental delay | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Intellectual Disability | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Multiple disabilities | 6 |  |  |  |  | 6 |  |  |  |  |


| Subgroup | Status | Comprehension |  |  |  |  |  | Overall |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | Min | Mean | Max | SD | N |  | Min | Mean | Max | SD |
|  | Orthopedic impairment |  | 1 |  |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment |  | 6 |  |  |  |  |  | 6 |  |  |  |  |
|  | Specific learning disability |  | 7 |  |  |  |  |  | 7 |  |  |  |  |
|  | Speech or language impairment |  | 63 | 3978 | 5297.7 | 6009 | 462.7 |  | 63 | 3646 | 5002.1 | 5695 | 436.9 |

* Scale scores cannot be compared across grade bands.

Table S1.2: Screener Scale Score Summary by Subgroup - Grade 1

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,524 | 288 | 509.4 | 678 | 91.4 | 1,524 | 286 | 492.8 | 704 | 96.8 |
| Gender | Female | 665 | 288 | 515.9 | 678 | 91.6 | 665 | 286 | 496.7 | 704 | 99.0 |
|  | Male | 722 | 288 | 502.5 | 678 | 91.8 | 722 | 286 | 488.6 | 704 | 95.3 |
|  | Missing | 137 | 298 | 514.2 | 678 | 86.5 | 137 | 307 | 495.8 | 704 | 93.5 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 450 | 288 | 546.3 | 678 | 89.8 | 450 | 286 | 537.2 | 704 | 100.1 |
|  | Black or African American | 263 | 288 | 515.9 | 678 | 80.7 | 263 | 286 | 498.5 | 704 | 89.1 |
|  | Hispanic or Latino | 388 | 288 | 472.8 | 678 | 86.9 | 388 | 286 | 448.9 | 704 | 81.9 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 337 | 497.9 | 596 | 81.7 | 10 | 377 | 463.4 | 625 | 83.3 |
|  | Two or More Races | 144 | 288 | 482.5 | 678 | 89.4 | 144 | 286 | 465.9 | 704 | 87.6 |
|  | White | 248 | 288 | 510.9 | 678 | 86.9 | 248 | 286 | 492.5 | 704 | 90.7 |
|  | Other/Unknown | 18 | 314 | 473.4 | 634 | 85.6 | 18 | 338 | 470.8 | 670 | 87.1 |
| Other | Gifted | 9 |  |  |  |  | 9 |  |  |  |  |
|  | IEP | 12 | 350 | 484.4 | 619 | 102.4 | 12 | 303 | 459.0 | 593 | 100.2 |
|  | Migrant | 7 |  |  |  |  | 7 |  |  |  |  |
| Primary Disability | Autism | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Orthopedic impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Speech or language impairment | 5 |  |  |  |  | 5 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.2: Screener Scale Score Summary by Subgroup - Grade 1 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,524 | 310 | 491.5 | 669 | 102.6 | 1,524 | 283 | 489.0 | 698 | 98.0 |
| Gender | Female | 665 | 310 | 495.8 | 669 | 104.7 | 665 | 283 | 493.5 | 698 | 100.0 |
|  | Male | 722 | 310 | 485.7 | 669 | 100.8 | 722 | 283 | 483.8 | 698 | 96.7 |
|  | Missing | 137 | 319 | 501.3 | 669 | 100.8 | 137 | 305 | 493.7 | 698 | 93.9 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 450 | 310 | 533.8 | 669 | 95.9 | 450 | 283 | 533.2 | 698 | 100.4 |
|  | Black or African American | 263 | 310 | 501.9 | 669 | 88.0 | 263 | 283 | 491.7 | 698 | 89.7 |
|  | Hispanic or Latino | 388 | 310 | 448.0 | 669 | 100.9 | 388 | 283 | 448.3 | 698 | 85.4 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 340 | 485.3 | 629 | 78.7 | 10 | 384 | 467.4 | 620 | 78.3 |
|  | Two or More Races | 144 | 310 | 457.0 | 669 | 102.7 | 144 | 283 | 459.0 | 698 | 89.4 |
|  | White | 248 | 310 | 495.6 | 669 | 99.3 | 248 | 283 | 490.1 | 698 | 93.7 |
|  | Other/Unknown | 18 | 335 | 440.8 | 652 | 94.0 | 18 | 345 | 451.7 | 669 | 81.2 |
| Other | Gifted | 9 |  |  |  |  | 9 |  |  |  |  |
|  | IEP | 12 | 317 | 455.5 | 575 | 91.9 | 12 | 300 | 465.0 | 600 | 105.0 |
|  | Migrant | 7 |  |  |  |  | 7 |  |  |  |  |
| Primary Disability | Autism | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Orthopedic impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Speech or language impairment | 5 |  |  |  |  | 5 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.2: Screener Scale Score Summary by Subgroup - Grade 1 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,524 | 3785 | 5199.7 | 6387 | 631.9 | 1,524 | 3364 | 5050.7 | 6629 | 778.4 |
| Gender | Female | 665 | 3785 | 5233.9 | 6387 | 637.7 | 665 | 3364 | 5091.1 | 6629 | 793.9 |
|  | Male | 722 | 3785 | 5165.1 | 6387 | 630.3 | 722 | 3364 | 5004.8 | 6629 | 768.6 |
|  | Missing | 137 | 3785 | 5216.4 | 6387 | 605.6 | 137 | 3502 | 5096.9 | 6629 | 745.4 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 450 | 3785 | 5471.3 | 6387 | 634.8 | 450 | 3364 | 5398.4 | 6629 | 774.4 |
|  | Black or African American | 263 | 3785 | 5263.7 | 6387 | 578.6 | 263 | 3364 | 5103.4 | 6629 | 684.8 |
|  | Hispanic or Latino | 388 | 3785 | 4913.5 | 6387 | 558.3 | 388 | 3364 | 4708.4 | 6629 | 705.6 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 4053 | 5033.4 | 5860 | 580.3 | 10 | 4090 | 4907.6 | 6060 | 622.0 |
|  | Two or More Races | 144 | 3785 | 5030.1 | 6387 | 597.0 | 144 | 3364 | 4805.7 | 6629 | 740.6 |
|  | White | 248 | 3785 | 5195.4 | 6387 | 590.4 | 248 | 3364 | 5065.6 | 6629 | 743.0 |
|  | Other/Unknown | 18 | 3785 | 5071.1 | 6261 | 636.7 | 18 | 3852 | 4746.2 | 6363 | 696.6 |
| Other | Gifted | 9 |  |  |  |  | 9 |  |  |  |  |
|  | IEP | 12 | 4050 | 4973.6 | 5888 | 661.5 | 12 | 3575 | 4799.9 | 5894 | 795.0 |
|  | Migrant | 7 |  |  |  |  | 7 |  |  |  |  |
| Primary Disability | Autism | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Orthopedic impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Speech or language impairment |  |  |  |  |  |  |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.3: Screener Scale Score Summary by Subgroup - Grade 2

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,159 | 286 | 483.9 | 710 | 85.7 | 1,160 | 278 | 473.3 | 734 | 92.4 |
| Gender | Female | 480 | 286 | 491.4 | 694 | 88.6 | 481 | 278 | 480.9 | 714 | 94.3 |
|  | Male | 595 | 286 | 477.2 | 710 | 83.6 | 595 | 278 | 466.4 | 734 | 90.5 |
|  | Missing | 84 | 286 | 488.5 | 710 | 80.0 | 84 | 278 | 478.0 | 734 | 91.9 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 279 | 286 | 505.7 | 710 | 87.4 | 280 | 278 | 501.5 | 734 | 95.9 |
|  | Black or African American | 223 | 286 | 501.8 | 710 | 80.5 | 223 | 278 | 489.6 | 734 | 88.1 |
|  | Hispanic or Latino | 312 | 286 | 456.0 | 645 | 76.2 | 312 | 278 | 441.3 | 665 | 79.3 |
|  | Native Hawaiian or Other Pacific Islander | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Two or More Races | 125 | 286 | 461.4 | 656 | 82.7 | 125 | 278 | 447.0 | 663 | 86.2 |
|  | White | 191 | 286 | 491.1 | 686 | 89.4 | 191 | 278 | 481.2 | 706 | 96.3 |
|  | Other/Unknown | 18 | 356 | 479.2 | 670 | 98.9 | 18 | 350 | 476.6 | 700 | 104.7 |
| Other | Gifted | 19 | 408 | 568.3 | 640 | 65.0 | 19 | 430 | 565.7 | 641 | 58.5 |
|  | IEP | 7 |  |  |  |  | 8 |  |  |  |  |
|  | Migrant | 1 |  |  |  |  | 1 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 0 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Speech or language impairment | 4 |  |  |  |  | 4 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.3: Screener Scale Score Summary by Subgroup - Grade 2 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,159 | 292 | 464.9 | 703 | 104.4 | 1,160 | 276 | 469.0 | 737 | 94.8 |
| Gender | Female | 480 | 292 | 473.6 | 691 | 106.1 | 481 | 276 | 476.7 | 721 | 97.8 |
|  | Male | 595 | 292 | 457.3 | 703 | 102.3 | 595 | 276 | 461.9 | 737 | 92.2 |
|  | Missing | 84 | 292 | 468.8 | 703 | 106.8 | 84 | 276 | 474.9 | 737 | 93.1 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 279 | 292 | 485.3 | 703 | 106.7 | 280 | 276 | 499.7 | 737 | 97.9 |
|  | Black or African American | 223 | 292 | 493.5 | 703 | 90.2 | 223 | 276 | 485.2 | 737 | 90.3 |
|  | Hispanic or Latino | 312 | 292 | 430.5 | 659 | 99.4 | 312 | 276 | 435.2 | 651 | 81.0 |
|  | Native Hawaiian or Other Pacific Islander | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Two or More Races | 125 | 292 | 438.4 | 661 | 103.6 | 125 | 276 | 440.1 | 658 | 87.6 |
|  | White | 191 | 292 | 475.7 | 685 | 106.5 | 191 | 276 | 477.9 | 712 | 99.3 |
|  | Other/Unknown | 18 | 324 | 454.1 | 680 | 118.3 | 18 | 352 | 472.3 | 695 | 108.3 |
| Other | Gifted | 19 | 421 | 514.6 | 614 | 61.6 | 19 | 415 | 564.2 | 641 | 62.5 |
|  | IEP | 7 |  |  |  |  | 8 |  |  |  |  |
|  | Migrant | 1 |  |  |  |  | 1 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 0 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Speech or language impairment | 4 |  |  |  |  | 4 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.3: Screener Scale Score Summary by Subgroup - Grade 2 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,160 | 3756 | 5040.9 | 6439 | 633.4 | 1,160 | 3326 | 4861.2 | 6880 | 752.8 |
| Gender | Female | 481 | 3756 | 5092.8 | 6439 | 641.8 | 481 | 3326 | 4925.4 | 6747 | 772.4 |
|  | Male | 595 | 3756 | 4995.8 | 6439 | 629.6 | 595 | 3326 | 4803.8 | 6880 | 735.1 |
|  | Missing | 84 | 3756 | 5062.0 | 6439 | 593.5 | 84 | 3326 | 4899.6 | 6880 | 739.2 |
| Ethnicity | American Indian or Alaskan Native | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Asian | 280 | 3756 | 5203.9 | 6439 | 640.7 | 280 | 3326 | 5067.5 | 6880 | 771.7 |
|  | Black or African American | 223 | 3756 | 5172.7 | 6439 | 612.3 | 223 | 3326 | 5025.5 | 6880 | 694.1 |
|  | Hispanic or Latino | 312 | 3756 | 4834.4 | 6439 | 570.3 | 312 | 3326 | 4597.0 | 6325 | 666.4 |
|  | Native Hawaiian or Other Pacific Islander | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Two or More Races | 125 | 3756 | 4875.0 | 6329 | 608.7 | 125 | 3326 | 4648.9 | 6392 | 725.8 |
|  | White | 191 | 3756 | 5087.0 | 6439 | 642.9 | 191 | 3326 | 4934.0 | 6665 | 782.3 |
|  | Other/Unknown | 18 | 4102 | 5017.1 | 6329 | 708.7 | 18 | 3877 | 4832.3 | 6599 | 866.0 |
| Other | Gifted | 19 | 4565 | 5781.9 | 6439 | 450.8 | 19 | 4525 | 5508.4 | 6168 | 473.8 |
|  | IEP | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Migrant | 1 |  |  |  |  | 1 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Speech or language impairment | 4 |  |  |  |  | 4 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.4: Screener Scale Score Summary by Subgroup - Grade 3

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,002 | 286 | 501.7 | 710 | 101.6 | 1,001 | 278 | 497.0 | 734 | 111.5 |
| Gender | Female | 440 | 286 | 511.6 | 710 | 103.5 | 439 | 278 | 507.2 | 734 | 113.9 |
|  | Male | 493 | 286 | 495.1 | 710 | 98.3 | 493 | 278 | 490.2 | 734 | 108.0 |
|  | Missing | 69 | 321 | 486.2 | 691 | 108.2 | 69 | 321 | 480.6 | 726 | 115.9 |
| Ethnicity | American Indian or Alaskan Native | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Asian | 225 | 286 | 543.7 | 710 | 102.6 | 225 | 278 | 547.8 | 734 | 111.0 |
|  | Black or African American | 201 | 286 | 496.2 | 691 | 101.8 | 201 | 278 | 493.8 | 726 | 109.0 |
|  | Hispanic or Latino | 283 | 286 | 473.8 | 710 | 94.6 | 283 | 278 | 464.0 | 734 | 104.2 |
|  | Native Hawaiian or Other Pacific Islander | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Two or More Races | 132 | 286 | 482.2 | 710 | 91.7 | 131 | 278 | 467.3 | 734 | 100.6 |
|  | White | 138 | 286 | 515.9 | 710 | 103.1 | 138 | 278 | 512.3 | 734 | 112.6 |
|  | Other/Unknown | 15 | 331 | 504.9 | 585 | 77.3 | 15 | 296 | 505.6 | 603 | 78.5 |
| Other | Gifted | 3 |  |  |  |  | 3 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 6 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Speech or language impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.4: Screener Scale Score Summary by Subgroup - Grade 3 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,001 | 292 | 481.3 | 703 | 121.4 | 1,001 | 276 | 494.6 | 737 | 113.5 |
| Gender | Female | 439 | 292 | 491.2 | 703 | 123.2 | 439 | 276 | 505.5 | 737 | 116.8 |
|  | Male | 493 | 292 | 474.4 | 703 | 117.8 | 493 | 276 | 487.0 | 737 | 109.1 |
|  | Missing | 69 | 310 | 468.1 | 698 | 131.0 | 69 | 310 | 478.9 | 730 | 118.3 |
| Ethnicity | American Indian or Alaskan Native | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Asian | 225 | 292 | 529.6 | 703 | 119.0 | 225 | 276 | 547.0 | 737 | 111.4 |
|  | Black or African American | 201 | 292 | 485.2 | 698 | 112.8 | 201 | 276 | 490.6 | 730 | 111.4 |
|  | Hispanic or Latino | 283 | 292 | 441.2 | 703 | 119.5 | 283 | 276 | 459.5 | 737 | 106.5 |
|  | Native Hawaiian or Other Pacific Islander | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Two or More Races | 131 | 292 | 455.3 | 703 | 113.6 | 131 | 276 | 464.9 | 737 | 103.3 |
|  | White | 138 | 292 | 497.1 | 703 | 119.5 | 138 | 276 | 512.4 | 737 | 113.3 |
|  | Other/Unknown | 15 | 301 | 519.5 | 629 | 98.4 | 15 | 292 | 510.6 | 609 | 77.8 |
| Other | Gifted | 3 |  |  |  |  | 3 |  |  |  |  |
|  | IEP | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Speech or language impairment |  |  |  |  |  |  |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.4: Screener Scale Score Summary by Subgroup - Grade 3 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,002 | 3756 | 5166.0 | 6439 | 729.0 | 1,002 | 3326 | 5031.1 | 6880 | 900.7 |
| Gender | Female | 440 | 3756 | 5228.8 | 6439 | 731.0 | 440 | 3326 | 5113.9 | 6880 | 920.3 |
|  | Male | 493 | 3756 | 5130.0 | 6439 | 719.2 | 493 | 3326 | 4974.9 | 6880 | 869.7 |
|  | Missing | 69 | 3852 | 5022.5 | 6439 | 757.5 | 69 | 3582 | 4905.2 | 6798 | 958.8 |
| Ethnicity | American Indian or Alaskan Native | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Asian | 225 | 3756 | 5475.5 | 6439 | 717.1 | 225 | 3326 | 5428.8 | 6880 | 892.9 |
|  | Black or African American | 201 | 3756 | 5148.7 | 6439 | 727.7 | 201 | 3326 | 5015.4 | 6798 | 871.3 |
|  | Hispanic or Latino | 283 | 3756 | 4964.8 | 6439 | 692.7 | 283 | 3326 | 4751.4 | 6880 | 857.4 |
|  | Native Hawaiian or Other Pacific Islander | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Two or More Races | 132 | 3756 | 4995.4 | 6439 | 663.7 | 132 | 3326 | 4813.4 | 6880 | 815.7 |
|  | White | 138 | 3756 | 5256.1 | 6439 | 734.7 | 138 | 3326 | 5160.3 | 6880 | 900.2 |
|  | Other/Unknown | 15 | 3935 | 5155.2 | 5723 | 518.7 | 15 | 3476 | 5172.7 | 5917 | 658.0 |
| Other | Gifted | 3 |  |  |  |  | 3 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Speech or language impairment |  |  |  |  |  |  |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.5: Screener Scale Score Summary by Subgroup - Grade 4

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 829 | 270 | 494.0 | 778 | 119.0 | 829 | 270 | 496.1 | 795 | 117.3 |
| Gender | Female | 379 | 270 | 505.3 | 762 | 118.7 | 379 | 270 | 505.2 | 773 | 115.9 |
|  | Male | 391 | 270 | 481.9 | 778 | 118.4 | 391 | 270 | 486.2 | 795 | 117.3 |
|  | Missing | 59 | 304 | 500.7 | 712 | 118.4 | 59 | 305 | 503.5 | 729 | 122.8 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Asian | 181 | 270 | 549.5 | 778 | 113.3 | 182 | 270 | 547.2 | 795 | 117.0 |
|  | Black or African American | 159 | 295 | 511.8 | 747 | 102.1 | 159 | 320 | 513.0 | 769 | 103.3 |
|  | Hispanic or Latino | 242 | 270 | 452.9 | 762 | 109.3 | 242 | 270 | 457.6 | 773 | 103.6 |
|  | Native Hawaiian or Other Pacific Islander | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Two or More Races | 104 | 270 | 465.9 | 757 | 121.2 | 103 | 270 | 471.6 | 775 | 119.1 |
|  | White | 121 | 270 | 492.6 | 753 | 130.4 | 121 | 270 | 494.7 | 766 | 129.9 |
|  | Other/Unknown | 13 | 352 | 493.8 | 675 | 109.0 | 13 | 358 | 492.3 | 680 | 109.7 |
| Other | Gifted | 6 |  |  |  |  | 6 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 0 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 0 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Speech or language impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.5: Screener Scale Score Summary by Subgroup - Grade 4 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 828 | 270 | 504.0 | 786 | 151.3 | 829 | 268 | 496.0 | 797 | 125.7 |
| Gender | Female | 379 | 270 | 518.2 | 776 | 152.2 | 379 | 268 | 507.7 | 782 | 125.1 |
|  | Male | 390 | 270 | 487.6 | 786 | 148.8 | 391 | 268 | 483.9 | 797 | 124.7 |
|  | Missing | 59 | 289 | 521.5 | 749 | 154.3 | 59 | 305 | 501.0 | 731 | 130.5 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Asian | 181 | 270 | 568.4 | 786 | 141.3 | 182 | 268 | 553.2 | 797 | 121.3 |
|  | Black or African American | 159 | 288 | 534.8 | 772 | 129.2 | 159 | 303 | 514.5 | 776 | 110.8 |
|  | Hispanic or Latino | 242 | 270 | 450.7 | 776 | 143.9 | 242 | 268 | 453.4 | 782 | 113.0 |
|  | Native Hawaiian or Other Pacific Islander | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Two or More Races | 103 | 270 | 467.6 | 773 | 159.5 | 103 | 268 | 467.3 | 770 | 127.8 |
|  | White | 121 | 270 | 504.4 | 747 | 159.5 | 121 | 268 | 495.9 | 772 | 138.6 |
|  | Other/Unknown | 13 | 306 | 489.1 | 687 | 131.0 | 13 | 348 | 488.7 | 688 | 110.7 |
| Other | Gifted | 6 |  |  |  |  | 6 |  |  |  |  |
|  | IEP | 6 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 0 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Speech or language impairment | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.5: Screener Scale Score Summary by Subgroup - Grade 4 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 830 | 3649 | 5056.0 | 6700 | 723.3 | 830 | 3237 | 5071.2 | 7401 | 1027.2 |
| Gender | Female | 379 | 3649 | 5110.7 | 6588 | 712.5 | 379 | 3237 | 5165.2 | 7277 | 1025.8 |
|  | Male | 392 | 3649 | 4997.1 | 6700 | 731.6 | 392 | 3237 | 4969.4 | 7401 | 1017.1 |
|  | Missing | 59 | 3962 | 5095.9 | 6284 | 718.7 | 59 | 3521 | 5143.1 | 6891 | 1056.8 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Asian | 182 | 3649 | 5370.4 | 6700 | 680.8 | 182 | 3237 | 5535.2 | 7401 | 980.3 |
|  | Black or African American | 159 | 3649 | 5173.0 | 6421 | 640.6 | 159 | 3483 | 5242.5 | 7208 | 886.2 |
|  | Hispanic or Latino | 242 | 3649 | 4815.8 | 6700 | 663.1 | 242 | 3237 | 4714.5 | 7277 | 942.4 |
|  | Native Hawaiian or Other Pacific Islander | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Two or More Races | 104 | 3649 | 4898.3 | 6700 | 742.2 | 104 | 3237 | 4830.4 | 7242 | 1056.5 |
|  | White | 121 | 3649 | 5028.8 | 6588 | 790.0 | 121 | 3237 | 5065.2 | 7149 | 1120.4 |
|  | Other/Unknown | 13 | 4164 | 5114.8 | 6300 | 760.4 | 13 | 3793 | 5017.0 | 6511 | 911.0 |
| Other | Gifted | 6 |  |  |  |  | 6 |  |  |  |  |
|  | IEP | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Hearing Impaired | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Comprehension |  |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Orthopedic impairment |  | 1 |  |  |  |  |  |  |  |  |  |
|  | Other health impairment |  | 1 |  |  |  |  |  |  |  |  |  |
|  | Specific learning disability |  | 2 |  |  |  |  |  |  |  |  |  |
|  | Speech or language impairment |  | 2 |  |  |  |  |  |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.6: Screener Scale Score Summary by Subgroup - Grade 5

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 834 | 270 | 507.2 | 772 | 125.0 | 834 | 270 | 510.4 | 786 | 124.2 |
| Gender | Female | 363 | 270 | 510.9 | 772 | 129.0 | 363 | 270 | 513.1 | 786 | 128.7 |
|  | Male | 418 | 270 | 504.7 | 772 | 122.3 | 418 | 270 | 508.0 | 786 | 121.3 |
|  | Missing | 53 | 312 | 501.3 | 740 | 119.5 | 53 | 323 | 510.8 | 766 | 117.2 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 174 | 270 | 550.8 | 768 | 113.7 | 174 | 270 | 551.0 | 781 | 118.6 |
|  | Black or African American | 169 | 270 | 508.5 | 745 | 120.0 | 169 | 270 | 508.8 | 755 | 121.1 |
|  | Hispanic or Latino | 222 | 285 | 472.6 | 772 | 113.5 | 222 | 290 | 478.8 | 786 | 108.2 |
|  | Native Hawaiian or Other Pacific Islander | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Two or More Races | 109 | 270 | 508.5 | 772 | 133.0 | 109 | 270 | 514.0 | 786 | 128.5 |
|  | White | 145 | 270 | 509.1 | 772 | 137.3 | 145 | 270 | 511.4 | 786 | 139.9 |
|  | Other/Unknown | 7 |  |  |  |  | 7 |  |  |  |  |
| Other | Gifted | 8 |  |  |  |  | 8 |  |  |  |  |
|  | IEP | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Migrant | 1 |  |  |  |  | 1 |  |  |  |  |
| Primary Disability | Developmental delay | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Emotional disturbance | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Specific learning disability |  |  |  |  |  |  |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.6: Screener Scale Score Summary by Subgroup - Grade 5 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 834 | 270 | 516.2 | 782 | 151.1 | 834 | 268 | 511.0 | 791 | 130.6 |
| Gender | Female | 363 | 270 | 517.6 | 782 | 154.9 | 363 | 268 | 515.2 | 791 | 134.3 |
|  | Male | 418 | 270 | 515.0 | 782 | 148.2 | 418 | 268 | 507.9 | 791 | 128.0 |
|  | Missing | 53 | 293 | 515.2 | 770 | 150.3 | 53 | 314 | 506.7 | 772 | 126.6 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 174 | 270 | 560.4 | 780 | 142.0 | 174 | 268 | 553.3 | 787 | 122.8 |
|  | Black or African American | 169 | 270 | 527.0 | 765 | 138.4 | 169 | 268 | 511.1 | 763 | 126.3 |
|  | Hispanic or Latino | 222 | 281 | 471.0 | 782 | 147.2 | 222 | 289 | 474.7 | 791 | 116.4 |
|  | Native Hawaiian or Other Pacific Islander | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Two or More Races | 109 | 270 | 517.6 | 782 | 156.9 | 109 | 268 | 512.5 | 791 | 137.3 |
|  | White | 145 | 270 | 519.8 | 782 | 160.4 | 145 | 268 | 516.9 | 791 | 143.6 |
|  | Other/Unknown | 7 |  |  |  |  | 7 |  |  |  |  |
| Other | Gifted | 8 |  |  |  |  | 8 |  |  |  |  |
|  | IEP | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Migrant | 1 |  |  |  |  | 1 |  |  |  |  |
| Primary Disability | Developmental delay | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Emotional disturbance | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Specific learning disability | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.6: Screener Scale Score Summary by Subgroup - Grade 5 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 834 | 3649 | 5144.2 | 6700 | 771.4 | 834 | 3237 | 5181.6 | 7352 | 1060.4 |
| Gender | Female | 363 | 3649 | 5158.4 | 6700 | 792.7 | 363 | 3237 | 5205.5 | 7352 | 1091.6 |
|  | Male | 418 | 3649 | 5133.6 | 6700 | 760.1 | 418 | 3237 | 5163.6 | 7352 | 1038.8 |
|  | Missing | 53 | 4034 | 5130.5 | 6415 | 722.0 | 53 | 3591 | 5160.3 | 7186 | 1028.2 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 174 | 3649 | 5418.4 | 6627 | 698.7 | 174 | 3237 | 5528.7 | 7323 | 985.9 |
|  | Black or African American | 169 | 3649 | 5144.6 | 6700 | 755.0 | 169 | 3237 | 5203.7 | 7141 | 1010.5 |
|  | Hispanic or Latino | 222 | 3809 | 4952.4 | 6627 | 698.5 | 222 | 3383 | 4882.8 | 7352 | 971.8 |
|  | Native Hawaiian or Other Pacific Islander | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Two or More Races | 109 | 3649 | 5169.4 | 6627 | 814.8 | 109 | 3237 | 5196.0 | 7352 | 1111.5 |
|  | White | 145 | 3649 | 5115.6 | 6700 | 853.9 | 145 | 3237 | 5206.1 | 7352 | 1161.9 |
|  | Other/Unknown | 7 |  |  |  |  | 7 |  |  |  |  |
| Other | Gifted | 8 |  |  |  |  | 8 |  |  |  |  |
|  | IEP | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Migrant | 1 |  |  |  |  | 1 |  |  |  |  |
| Primary Disability | Developmental delay | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Emotional disturbance | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Specific learning disability | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.7: Screener Scale Score Summary by Subgroup - Grade 6

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 675 | 279 | 507.4 | 738 | 113.2 | 675 | 296 | 511.6 | 733 | 109.0 |
| Gender | Female | 298 | 279 | 518.1 | 738 | 116.2 | 298 | 296 | 521.9 | 733 | 111.0 |
|  | Male | 322 | 279 | 500.5 | 738 | 110.3 | 322 | 296 | 505.1 | 733 | 107.2 |
|  | Missing | 55 | 306 | 489.9 | 715 | 110.1 | 55 | 312 | 494.3 | 712 | 105.3 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Asian | 125 | 330 | 566.0 | 738 | 112.7 | 125 | 334 | 570.0 | 733 | 111.5 |
|  | Black or African American | 147 | 279 | 507.5 | 738 | 104.8 | 147 | 296 | 511.4 | 733 | 102.4 |
|  | Hispanic or Latino | 230 | 305 | 476.9 | 738 | 103.8 | 230 | 312 | 481.0 | 733 | 97.5 |
|  | Native Hawaiian or Other Pacific Islander | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Two or More Races | 54 | 279 | 479.2 | 696 | 106.9 | 54 | 296 | 484.9 | 697 | 102.5 |
|  | White | 104 | 279 | 520.8 | 738 | 121.5 | 104 | 296 | 524.5 | 733 | 114.7 |
|  | Other/Unknown | 9 |  |  |  |  | 9 |  |  |  |  |
| Other | Gifted | 4 |  |  |  |  | 4 |  |  |  |  |
|  | IEP | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Migrant | 4 |  |  |  |  | 4 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |

[^10]* Domains with Exemption are excluded.

Table S1.7: Screener Scale Score Summary by Subgroup - Grade 6 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 675 | 296 | 518.6 | 732 | 125.7 | 675 | 281 | 507.6 | 741 | 115.4 |
| Gender | Female | 298 | 296 | 529.0 | 732 | 128.7 | 298 | 281 | 518.2 | 741 | 118.7 |
|  | Male | 322 | 296 | 512.5 | 732 | 123.4 | 322 | 281 | 500.2 | 741 | 112.2 |
|  | Missing | 55 | 305 | 497.6 | 703 | 119.7 | 55 | 297 | 493.6 | 721 | 112.6 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Asian | 125 | 326 | 579.4 | 732 | 118.0 | 125 | 319 | 568.6 | 741 | 118.9 |
|  | Black or African American | 147 | 296 | 529.2 | 732 | 112.5 | 147 | 281 | 506.8 | 741 | 107.7 |
|  | Hispanic or Latino | 230 | 305 | 479.6 | 732 | 122.9 | 230 | 297 | 474.6 | 741 | 103.3 |
|  | Native Hawaiian or Other Pacific Islander | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Two or More Races | 54 | 296 | 488.2 | 711 | 123.8 | 54 | 281 | 480.4 | 705 | 107.1 |
|  | White | 104 | 296 | 533.7 | 732 | 129.8 | 104 | 281 | 525.2 | 741 | 121.6 |
|  | Other/Unknown | 9 |  |  |  |  | 9 |  |  |  |  |
| Other | Gifted | 4 |  |  |  |  | 4 |  |  |  |  |
|  | IEP | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Migrant | 4 |  |  |  |  | 4 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |

[^11]* Domains with Exemption are excluded.

Table S1.7: Screener Scale Score Summary by Subgroup - Grade 6 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 675 | 3803 | 5181.1 | 6476 | 721.8 | 675 | 3388 | 5188.2 | 6974 | 921.7 |
| Gender | Female | 298 | 3803 | 5245.2 | 6476 | 727.3 | 298 | 3388 | 5272.9 | 6974 | 945.3 |
|  | Male | 322 | 3803 | 5142.2 | 6476 | 716.5 | 322 | 3388 | 5134.6 | 6974 | 900.6 |
|  | Missing | 55 | 3938 | 5061.6 | 6476 | 703.6 | 55 | 3507 | 5042.7 | 6715 | 887.8 |
| Ethnicity | American Indian or Alaskan Native | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Asian | 125 | 4014 | 5537.0 | 6476 | 703.2 | 125 | 3794 | 5666.6 | 6974 | 915.2 |
|  | Black or African American | 147 | 3803 | 5183.6 | 6476 | 683.3 | 147 | 3388 | 5209.0 | 6974 | 846.1 |
|  | Hispanic or Latino | 230 | 3803 | 5000.5 | 6476 | 679.3 | 230 | 3499 | 4919.2 | 6974 | 854.7 |
|  | Native Hawaiian or Other Pacific Islander | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Two or More Races | 54 | 3803 | 5009.0 | 6380 | 706.2 | 54 | 3388 | 4960.3 | 6695 | 873.9 |
|  | White | 104 | 3803 | 5238.7 | 6476 | 742.4 | 104 | 3388 | 5309.4 | 6974 | 968.7 |
|  | Other/Unknown | 9 |  |  |  |  | 9 |  |  |  |  |
| Other | Gifted | 4 |  |  |  |  | 4 |  |  |  |  |
|  | IEP | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Migrant | 4 |  |  |  |  | 4 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.8: Screener Scale Score Summary by Subgroup - Grade 7

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 673 | 279 | 502.5 | 738 | 119.1 | 673 | 296 | 508.9 | 733 | 115.6 |
| Gender | Female | 317 | 279 | 511.5 | 738 | 119.2 | 317 | 296 | 517.0 | 733 | 116.0 |
|  | Male | 318 | 279 | 491.6 | 738 | 117.6 | 318 | 296 | 499.4 | 733 | 113.6 |
|  | Missing | 38 | 344 | 518.5 | 738 | 125.1 | 38 | 338 | 521.1 | 733 | 125.4 |
| Ethnicity | American Indian or Alaskan Native | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Asian | 121 | 279 | 558.7 | 738 | 116.5 | 121 | 296 | 566.9 | 733 | 113.0 |
|  | Black or African American | 137 | 296 | 518.9 | 738 | 112.9 | 137 | 322 | 520.2 | 733 | 109.3 |
|  | Hispanic or Latino | 222 | 279 | 464.0 | 738 | 110.4 | 222 | 296 | 471.2 | 733 | 107.0 |
|  | Native Hawaiian or Other Pacific Islander | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Two or More Races | 85 | 279 | 483.7 | 738 | 121.1 | 85 | 296 | 493.7 | 733 | 116.3 |
|  | White | 99 | 324 | 519.3 | 738 | 116.3 | 99 | 328 | 524.2 | 733 | 114.4 |
|  | Other/Unknown | 4 |  |  |  |  | 4 |  |  |  |  |
| Other | Gifted | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |


| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Visual impairment |  |  |  |  |  |  |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.8: Screener Scale Score Summary by Subgroup - Grade 7 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 673 | 296 | 507.4 | 732 | 132.5 | 673 | 281 | 504.7 | 741 | 121.5 |
| Gender | Female | 317 | 296 | 518.9 | 732 | 132.3 | 317 | 281 | 514.2 | 741 | 122.6 |
|  | Male | 318 | 296 | 493.7 | 732 | 131.5 | 318 | 281 | 494.1 | 741 | 119.2 |
|  | Missing | 38 | 319 | 526.1 | 732 | 134.8 | 38 | 323 | 514.8 | 741 | 126.9 |
| Ethnicity | American Indian or Alaskan Native | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Asian | 121 | 296 | 572.0 | 732 | 121.0 | 121 | 281 | 564.3 | 741 | 117.3 |
|  | Black or African American | 137 | 307 | 536.6 | 732 | 116.5 | 137 | 300 | 521.9 | 741 | 114.2 |
|  | Hispanic or Latino | 222 | 296 | 457.6 | 732 | 127.2 | 222 | 281 | 463.6 | 741 | 113.2 |
|  | Native Hawaiian or Other Pacific Islander | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Two or More Races | 85 | 296 | 479.7 | 732 | 138.7 | 85 | 281 | 483.3 | 741 | 121.2 |
|  | White | 99 | 330 | 530.1 | 732 | 128.1 | 99 | 313 | 523.9 | 741 | 119.9 |
|  | Other/Unknown | 4 |  |  |  |  | 4 |  |  |  |  |
| Other | Gifted | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |


| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Visual impairment |  |  |  |  |  | 0 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.8: Screener Scale Score Summary by Subgroup - Grade 7 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 673 | 3803 | 5151.3 | 6476 | 759.6 | 673 | 3388 | 5142.3 | 6974 | 974.7 |
| Gender | Female | 317 | 3803 | 5198.5 | 6476 | 748.5 | 317 | 3388 | 5219.5 | 6974 | 976.9 |
|  | Male | 318 | 3803 | 5091.0 | 6476 | 760.7 | 318 | 3388 | 5051.5 | 6974 | 961.2 |
|  | Missing | 38 | 4167 | 5262.5 | 6476 | 820.2 | 38 | 3702 | 5258.4 | 6974 | 1026.5 |
| Ethnicity | American Indian or Alaskan Native | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Asian | 121 | 3803 | 5511.6 | 6476 | 726.5 | 121 | 3388 | 5623.3 | 6974 | 924.8 |
|  | Black or African American | 137 | 3978 | 5233.0 | 6476 | 729.5 | 137 | 3554 | 5294.2 | 6974 | 901.3 |
|  | Hispanic or Latino | 222 | 3803 | 4911.6 | 6476 | 709.6 | 222 | 3388 | 4803.0 | 6974 | 914.6 |
|  | Native Hawaiian or Other Pacific Islander | 5 |  |  |  |  | 5 |  |  |  |  |
|  | Two or More Races | 85 | 3803 | 5066.4 | 6476 | 788.1 | 85 | 3388 | 4975.1 | 6974 | 995.3 |
|  | White | 99 | 3999 | 5233.0 | 6476 | 728.6 | 99 | 3697 | 5293.0 | 6974 | 954.7 |
|  | Other/Unknown | 4 |  |  |  |  | 4 |  |  |  |  |
| Other | Gifted | 1 |  |  |  |  | 1 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |


| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
|  | Visual impairment |  |  |  |  |  |  |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.9: Screener Scale Score Summary by Subgroup - Grade 8

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 577 | 279 | 502.0 | 738 | 114.0 | 577 | 296 | 510.7 | 733 | 109.2 |
| Gender | Female | 254 | 279 | 508.4 | 738 | 113.1 | 254 | 296 | 515.0 | 733 | 108.4 |
|  | Male | 285 | 279 | 494.1 | 738 | 114.7 | 285 | 296 | 504.4 | 733 | 110.2 |
|  | Missing | 38 | 370 | 518.8 | 738 | 113.7 | 38 | 359 | 529.9 | 733 | 106.1 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 102 | 381 | 548.6 | 738 | 109.8 | 102 | 377 | 553.6 | 733 | 107.8 |
|  | Black or African American | 110 | 279 | 519.3 | 722 | 103.2 | 110 | 296 | 528.2 | 723 | 96.0 |
|  | Hispanic or Latino | 190 | 279 | 474.5 | 717 | 110.0 | 190 | 296 | 486.1 | 710 | 105.3 |
|  | Native Hawaiian or Other Pacific Islander | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Two or More Races | 75 | 279 | 476.0 | 693 | 117.9 | 75 | 296 | 486.8 | 695 | 114.2 |
|  | White | 91 | 279 | 514.5 | 738 | 118.9 | 91 | 296 | 519.2 | 733 | 114.7 |
|  | Other/Unknown | 5 |  |  |  |  | 5 |  |  |  |  |
| Other | Gifted | 2 |  |  |  |  | 2 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.9: Screener Scale Score Summary by Subgroup - Grade 8 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 577 | 296 | 510.0 | 732 | 128.5 | 577 | 281 | 506.2 | 741 | 116.3 |
| Gender | Female | 254 | 296 | 518.6 | 732 | 125.0 | 254 | 281 | 512.7 | 741 | 115.0 |
|  | Male | 285 | 296 | 498.6 | 732 | 131.8 | 285 | 281 | 498.9 | 741 | 118.2 |
|  | Missing | 38 | 338 | 537.5 | 732 | 120.1 | 38 | 360 | 517.3 | 741 | 109.6 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 102 | 346 | 567.7 | 732 | 111.8 | 102 | 384 | 553.8 | 741 | 112.6 |
|  | Black or African American | 110 | 296 | 537.2 | 725 | 112.1 | 110 | 281 | 527.7 | 731 | 102.0 |
|  | Hispanic or Latino | 190 | 296 | 472.9 | 720 | 128.1 | 190 | 281 | 476.6 | 722 | 112.2 |
|  | Native Hawaiian or Other Pacific Islander | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Two or More Races | 75 | 296 | 477.7 | 709 | 140.9 | 75 | 281 | 480.1 | 704 | 121.7 |
|  | White | 91 | 296 | 523.9 | 732 | 124.8 | 91 | 281 | 516.6 | 741 | 121.3 |
|  | Other/Unknown | 5 |  |  |  |  | 5 |  |  |  |  |
| Other | Gifted | 2 |  |  |  |  | 2 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.9: Screener Scale Score Summary by Subgroup - Grade 8 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 577 | 3803 | 5155.0 | 6476 | 725.0 | 577 | 3388 | 5154.6 | 6974 | 932.3 |
| Gender | Female | 254 | 3803 | 5186.9 | 6476 | 724.1 | 254 | 3388 | 5206.3 | 6974 | 918.4 |
|  | Male | 285 | 3803 | 5106.5 | 6476 | 721.7 | 285 | 3388 | 5087.4 | 6974 | 946.7 |
|  | Missing | 38 | 4222 | 5306.0 | 6476 | 742.0 | 38 | 3991 | 5312.8 | 6974 | 897.0 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 102 | 4310 | 5424.0 | 6476 | 689.3 | 102 | 4199 | 5547.0 | 6974 | 872.1 |
|  | Black or African American | 110 | 3803 | 5270.3 | 6476 | 670.6 | 110 | 3388 | 5328.8 | 6889 | 815.7 |
|  | Hispanic or Latino | 190 | 3803 | 5001.3 | 6476 | 710.8 | 190 | 3388 | 4913.8 | 6816 | 912.9 |
|  | Native Hawaiian or Other Pacific Islander | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Two or More Races | 75 | 3803 | 4986.5 | 6380 | 752.4 | 75 | 3388 | 4932.1 | 6679 | 992.1 |
|  | White | 91 | 3803 | 5218.0 | 6476 | 744.5 | 91 | 3388 | 5244.9 | 6974 | 953.0 |
|  | Other/Unknown | 5 |  |  |  |  | 5 |  |  |  |  |
| Other | Gifted | 2 |  |  |  |  | 2 |  |  |  |  |
|  | IEP | 7 |  |  |  |  | 7 |  |  |  |  |
|  | Migrant | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Autism | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 4 |  |  |  |  | 4 |  |  |  |  |
|  | Specific learning disability | 3 |  |  |  |  | 3 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.10: Screener Scale Score Summary by Subgroup - Grade 9

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,042 | 297 | 482.1 | 731 | 109.9 | 1,042 | 309 | 487.1 | 733 | 105.4 |
| Gender | Female | 426 | 297 | 485.3 | 731 | 108.7 | 426 | 309 | 491.1 | 733 | 104.3 |
|  | Male | 550 | 297 | 477.8 | 731 | 109.5 | 550 | 309 | 482.4 | 733 | 104.9 |
|  | Missing | 66 | 297 | 497.7 | 731 | 120.4 | 66 | 309 | 500.0 | 733 | 116.0 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 148 | 297 | 540.3 | 731 | 106.3 | 148 | 309 | 546.7 | 733 | 103.0 |
|  | Black or African American | 222 | 297 | 499.4 | 723 | 95.2 | 222 | 309 | 502.7 | 722 | 90.8 |
|  | Hispanic or Latino | 402 | 297 | 443.6 | 731 | 102.8 | 402 | 309 | 449.9 | 733 | 98.4 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 297 | 411.0 | 586 | 93.2 | 10 | 309 | 421.4 | 610 | 95.4 |
|  | Two or More Races | 133 | 297 | 459.3 | 723 | 107.9 | 133 | 309 | 464.5 | 722 | 102.3 |
|  | White | 105 | 297 | 531.1 | 731 | 106.5 | 105 | 309 | 533.0 | 733 | 101.4 |
|  | Other/Unknown | 21 | 315 | 555.3 | 701 | 105.3 | 21 | 327 | 554.2 | 699 | 101.1 |
| Other | Gifted | 0 |  |  |  |  | 0 |  |  |  |  |
|  | IEP | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Migrant | 4 |  |  |  |  | 4 |  |  |  |  |
| Primary Disability | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Speech or language impairment | 1 |  |  |  |  | 1 |  |  |  |  |

[^12]* Domains with Exemption are excluded.

Table S1.10: Screener Scale Score Summary by Subgroup - Grade 9 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,042 | 332 | 494.2 | 722 | 119.1 | 1,042 | 315 | 487.9 | 732 | 105.5 |
| Gender | Female | 426 | 332 | 498.1 | 722 | 116.1 | 426 | 315 | 491.2 | 732 | 104.6 |
|  | Male | 550 | 332 | 489.7 | 722 | 120.0 | 550 | 315 | 483.4 | 732 | 104.8 |
|  | Missing | 66 | 332 | 506.1 | 722 | 129.7 | 66 | 315 | 503.0 | 732 | 116.0 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 148 | 332 | 563.5 | 722 | 107.4 | 148 | 315 | 545.0 | 732 | 101.8 |
|  | Black or African American | 222 | 332 | 522.1 | 718 | 102.6 | 222 | 315 | 504.0 | 726 | 92.5 |
|  | Hispanic or Latino | 402 | 332 | 445.2 | 722 | 110.4 | 402 | 315 | 450.4 | 732 | 96.4 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 332 | 431.3 | 606 | 108.7 | 10 | 315 | 419.1 | 597 | 92.0 |
|  | Two or More Races | 133 | 332 | 467.9 | 718 | 116.9 | 133 | 315 | 467.1 | 726 | 104.9 |
|  | White | 105 | 332 | 549.3 | 722 | 111.6 | 105 | 315 | 535.3 | 732 | 105.8 |
|  | Other/Unknown | 21 | 342 | 562.9 | 672 | 104.4 | 21 | 353 | 557.2 | 707 | 101.0 |
| Other | Gifted | 0 |  |  |  |  | 0 |  |  |  |  |
|  | IEP | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Migrant | 4 |  |  |  |  | 4 |  |  |  |  |
| Primary Disability | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Speech or language impairment | 1 |  |  |  |  | 1 |  |  |  |  |

[^13]* Domains with Exemption are excluded.

Table S1.10: Screener Scale Score Summary by Subgroup - Grade 9 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 1,042 | 3787 | 5012.1 | 6524 | 725.2 | 1,042 | 3605 | 4999.5 | 6923 | 878.2 |
| Gender | Female | 426 | 3787 | 5037.5 | 6524 | 721.0 | 426 | 3605 | 5029.1 | 6923 | 863.0 |
|  | Male | 550 | 3787 | 4981.4 | 6524 | 719.8 | 550 | 3605 | 4963.5 | 6923 | 878.9 |
|  | Missing | 66 | 3787 | 5105.1 | 6524 | 792.1 | 66 | 3605 | 5108.0 | 6923 | 963.6 |
| Ethnicity | American Indian or Alaskan Native | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Asian | 148 | 3787 | 5404.5 | 6524 | 700.4 | 148 | 3605 | 5499.4 | 6923 | 830.1 |
|  | Black or African American | 222 | 3787 | 5117.9 | 6524 | 624.1 | 222 | 3605 | 5158.4 | 6869 | 759.9 |
|  | Hispanic or Latino | 402 | 3787 | 4765.9 | 6524 | 693.2 | 402 | 3605 | 4667.3 | 6923 | 811.3 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 3787 | 4553.5 | 5790 | 626.9 | 10 | 3605 | 4452.9 | 5912 | 783.3 |
|  | Two or More Races | 133 | 3787 | 4850.9 | 6524 | 694.3 | 133 | 3605 | 4811.4 | 6869 | 860.5 |
|  | White | 105 | 3787 | 5320.6 | 6524 | 680.4 | 105 | 3605 | 5401.1 | 6923 | 846.8 |
|  | Other/Unknown | 21 | 3787 | 5503.8 | 6446 | 724.7 | 21 | 3785 | 5563.0 | 6618 | 814.3 |
| Other | Gifted | 0 |  |  |  |  | 0 |  |  |  |  |
|  | IEP | 8 |  |  |  |  | 8 |  |  |  |  |
|  | Migrant | 4 |  |  |  |  | 4 |  |  |  |  |
| Primary Disability | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Multiple disabilities | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 6 |  |  |  |  | 6 |  |  |  |  |
|  | Speech or language impairment | 1 |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.11: Screener Scale Score Summary by Subgroup - Grade 10

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 611 | 297 | 513.8 | 731 | 105.1 | 611 | 309 | 518.5 | 733 | 101.1 |
| Gender | Female | 268 | 297 | 517.6 | 731 | 102.5 | 268 | 309 | 522.1 | 733 | 98.5 |
|  | Male | 294 | 297 | 513.5 | 731 | 106.4 | 294 | 309 | 517.8 | 733 | 102.2 |
|  | Missing | 49 | 297 | 494.4 | 700 | 111.0 | 49 | 309 | 503.5 | 708 | 109.0 |
| Ethnicity | American Indian or Alaskan Native | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Asian | 104 | 369 | 554.6 | 731 | 93.9 | 104 | 374 | 557.2 | 733 | 93.3 |
|  | Black or African American | 143 | 297 | 536.9 | 731 | 95.4 | 143 | 309 | 540.4 | 733 | 92.9 |
|  | Hispanic or Latino | 175 | 297 | 469.9 | 731 | 102.8 | 175 | 309 | 478.1 | 733 | 98.3 |
|  | Native Hawaiian or Other Pacific Islander | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Two or More Races | 88 | 297 | 493.8 | 723 | 106.1 | 88 | 309 | 500.4 | 722 | 97.7 |
|  | White | 85 | 353 | 528.6 | 723 | 100.4 | 85 | 352 | 529.1 | 722 | 99.9 |
|  | Other/Unknown | 11 | 421 | 599.7 | 676 | 99.1 | 11 | 419 | 598.6 | 678 | 100.2 |
| Other | IEP | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Developmental delay | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.11: Screener Scale Score Summary by Subgroup - Grade 10 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 611 | 332 | 526.9 | 722 | 109.8 | 611 | 315 | 519.0 | 732 | 101.2 |
| Gender | Female | 268 | 332 | 533.0 | 722 | 108.2 | 268 | 315 | 523.7 | 732 | 98.5 |
|  | Male | 294 | 332 | 523.0 | 722 | 109.8 | 294 | 315 | 517.5 | 732 | 102.6 |
|  | Missing | 49 | 332 | 517.0 | 710 | 118.2 | 49 | 315 | 503.0 | 710 | 108.0 |
| Ethnicity | American Indian or Alaskan Native | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Asian | 104 | 361 | 569.4 | 722 | 98.6 | 104 | 392 | 554.7 | 732 | 92.6 |
|  | Black or African American | 143 | 332 | 558.0 | 722 | 94.9 | 143 | 315 | 543.6 | 732 | 94.0 |
|  | Hispanic or Latino | 175 | 332 | 473.5 | 722 | 110.8 | 175 | 315 | 478.6 | 732 | 97.2 |
|  | Native Hawaiian or Other Pacific Islander | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Two or More Races | 88 | 332 | 508.9 | 718 | 105.9 | 88 | 315 | 500.9 | 726 | 102.4 |
|  | White | 85 | 355 | 546.7 | 718 | 102.7 | 85 | 361 | 529.9 | 726 | 98.3 |
|  | Other/Unknown | 11 | 451 | 584.9 | 698 | 83.3 | 11 | 415 | 596.8 | 680 | 98.2 |
| Other | IEP | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Developmental delay | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.11: Screener Scale Score Summary by Subgroup - Grade 10 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 611 | 3787 | 5228.9 | 6524 | 704.7 | 611 | 3605 | 5257.8 | 6923 | 826.4 |
| Gender | Female | 268 | 3787 | 5251.4 | 6524 | 692.2 | 268 | 3605 | 5295.9 | 6923 | 806.9 |
|  | Male | 294 | 3787 | 5231.4 | 6524 | 711.9 | 294 | 3605 | 5242.8 | 6923 | 833.2 |
|  | Missing | 49 | 3787 | 5090.7 | 6303 | 727.4 | 49 | 3605 | 5139.1 | 6747 | 892.4 |
| Ethnicity | American Indian or Alaskan Native | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Asian | 104 | 4224 | 5506.0 | 6524 | 638.0 | 104 | 4083 | 5575.2 | 6923 | 746.0 |
|  | Black or African American | 143 | 3787 | 5370.0 | 6524 | 635.8 | 143 | 3605 | 5464.0 | 6923 | 742.8 |
|  | Hispanic or Latino | 175 | 3787 | 4942.9 | 6524 | 689.5 | 175 | 3605 | 4898.1 | 6923 | 814.2 |
|  | Native Hawaiian or Other Pacific Islander | 3 |  |  |  |  | 3 |  |  |  |  |
|  | Two or More Races | 88 | 3787 | 5099.5 | 6524 | 705.2 | 88 | 3605 | 5107.0 | 6869 | 810.7 |
|  | White | 85 | 4127 | 5317.3 | 6524 | 678.6 | 85 | 3942 | 5370.6 | 6869 | 796.0 |
|  | Other/Unknown | 11 | 4571 | 5857.2 | 6524 | 720.6 | 11 | 4500 | 5848.9 | 6544 | 752.1 |
| Other | IEP | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Developmental delay | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Emotional disturbance | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Intellectual Disability | 0 |  |  |  |  | 0 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 2 |  |  |  |  | 2 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.12: Screener Scale Score Summary by Subgroup - Grade 11

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 388 | 297 | 539.2 | 731 | 108.1 | 388 | 309 | 542.5 | 733 | 102.6 |
| Gender | Female | 186 | 297 | 532.0 | 731 | 110.5 | 186 | 309 | 535.5 | 733 | 104.9 |
|  | Male | 167 | 297 | 546.4 | 731 | 106.7 | 167 | 309 | 549.7 | 733 | 101.3 |
|  | Missing | 35 | 388 | 543.5 | 723 | 102.1 | 35 | 394 | 545.7 | 722 | 97.0 |
| Ethnicity | Asian | 71 | 297 | 568.0 | 731 | 102.4 | 71 | 309 | 572.4 | 733 | 97.4 |
|  | Black or African American | 88 | 297 | 531.6 | 731 | 89.2 | 88 | 309 | 536.8 | 733 | 80.5 |
|  | Hispanic or Latino | 124 | 297 | 503.9 | 731 | 117.3 | 124 | 309 | 507.1 | 733 | 112.1 |
|  | Native Hawaiian or Other Pacific Islander | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Two or More Races | 22 | 369 | 539.0 | 711 | 119.5 | 22 | 377 | 540.5 | 705 | 110.3 |
|  | White | 72 | 353 | 576.8 | 731 | 101.9 | 72 | 385 | 578.7 | 733 | 97.4 |
|  | Other/Unknown | 10 | 467 | 573.3 | 672 | 63.2 | 10 | 482 | 568.9 | 671 | 71.2 |
| Other | IEP | 2 |  |  |  |  | 2 |  |  |  |  |
| Primary Disability | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.12: Screener Scale Score Summary by Subgroup - Grade 11 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 388 | 332 | 555.6 | 722 | 110.0 | 388 | 315 | 543.6 | 732 | 104.7 |
| Gender | Female | 186 | 332 | 549.3 | 722 | 113.1 | 186 | 315 | 537.4 | 732 | 107.2 |
|  | Male | 167 | 332 | 560.8 | 722 | 109.0 | 167 | 315 | 549.6 | 732 | 103.0 |
|  | Missing | 35 | 373 | 564.9 | 718 | 97.9 | 35 | 398 | 548.2 | 726 | 100.5 |
| Ethnicity | Asian | 71 | 332 | 586.9 | 722 | 96.8 | 71 | 315 | 573.7 | 732 | 98.1 |
|  | Black or African American | 88 | 332 | 558.0 | 722 | 88.6 | 88 | 315 | 537.5 | 732 | 87.0 |
|  | Hispanic or Latino | 124 | 332 | 514.8 | 722 | 122.5 | 124 | 315 | 508.9 | 732 | 113.9 |
|  | Native Hawaiian or Other Pacific Islander | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Two or More Races | 22 | 362 | 555.4 | 713 | 129.8 | 22 | 378 | 546.5 | 716 | 117.3 |
|  | White | 72 | 363 | 587.7 | 722 | 100.6 | 72 | 387 | 579.0 | 732 | 98.2 |
|  | Other/Unknown | 10 | 443 | 591.7 | 686 | 81.6 | 10 | 473 | 559.1 | 664 | 57.4 |
| Other | IEP | 2 |  |  |  |  | 2 |  |  |  |  |
| Primary Disability | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.12: Screener Scale Score Summary by Subgroup - Grade 11 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 388 | 3787 | 5384.3 | 6524 | 703.8 | 388 | 3605 | 5466.1 | 6923 | 843.1 |
| Gender | Female | 186 | 3787 | 5329.5 | 6524 | 718.2 | 186 | 3605 | 5413.4 | 6923 | 864.4 |
|  | Male | 167 | 3787 | 5441.8 | 6524 | 696.4 | 167 | 3605 | 5516.1 | 6923 | 832.7 |
|  | Missing | 35 | 4278 | 5400.9 | 6524 | 655.5 | 35 | 4221 | 5507.7 | 6869 | 781.3 |
| Ethnicity | Asian | 71 | 3787 | 5576.0 | 6524 | 662.9 | 71 | 3605 | 5710.0 | 6923 | 774.2 |
|  | Black or African American | 88 | 3787 | 5340.4 | 6524 | 565.1 | 88 | 3605 | 5434.7 | 6923 | 680.1 |
|  | Hispanic or Latino | 124 | 3787 | 5144.3 | 6524 | 770.4 | 124 | 3605 | 5167.3 | 6923 | 928.1 |
|  | Native Hawaiian or Other Pacific Islander | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Two or More Races | 22 | 4238 | 5337.4 | 6336 | 720.1 | 22 | 4087 | 5468.7 | 6791 | 953.2 |
|  | White | 72 | 4240 | 5637.7 | 6524 | 661.7 | 72 | 4167 | 5749.1 | 6923 | 782.4 |
|  | Other/Unknown | 10 | 5023 | 5693.8 | 6404 | 528.1 | 10 | 4854 | 5706.2 | 6441 | 533.5 |
| Other | IEP | 2 |  |  |  |  | 2 |  |  |  |  |
| Primary Disability | Intellectual Disability | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.

Table S1.13: Screener Scale Score Summary by Subgroup - Grade 12

| Subgroup | Status | Listening |  |  |  |  | Reading |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 230 | 297 | 553.7 | 731 | 102.6 | 230 | 309 | 557.7 | 733 | 98.9 |
| Gender | Female | 112 | 332 | 558.8 | 731 | 90.7 | 112 | 333 | 564.3 | 733 | 86.2 |
|  | Male | 102 | 297 | 552.0 | 731 | 114.9 | 102 | 309 | 556.2 | 733 | 111.2 |
|  | Missing | 16 | 361 | 528.6 | 661 | 100.1 | 16 | 351 | 521.0 | 658 | 97.1 |
| Ethnicity | Asian | 45 | 361 | 593.0 | 731 | 84.5 | 45 | 351 | 594.6 | 733 | 85.4 |
|  | Black or African American | 49 | 393 | 539.2 | 731 | 88.5 | 49 | 389 | 552.1 | 733 | 85.5 |
|  | Hispanic or Latino | 64 | 297 | 499.6 | 731 | 117.9 | 64 | 309 | 504.7 | 733 | 114.5 |
|  | Native Hawaiian or Other Pacific Islander | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Two or More Races | 12 | 520 | 637.0 | 731 | 70.9 | 12 | 543 | 640.1 | 733 | 64.2 |
|  | White | 46 | 371 | 575.3 | 723 | 85.7 | 46 | 376 | 572.7 | 722 | 81.9 |
|  | Other/Unknown | 12 | 477 | 584.1 | 690 | 74.2 | 12 | 496 | 580.1 | 692 | 64.3 |
| Other | IEP | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.13: Screener Scale Score Summary by Subgroup - Grade 12 (cont.)

| Subgroup | Status | Speaking |  |  |  |  | Writing |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 230 | 332 | 570.9 | 722 | 101.8 | 230 | 315 | 555.8 | 732 | 100.5 |
| Gender | Female | 112 | 345 | 575.9 | 722 | 89.7 | 112 | 341 | 562.6 | 732 | 87.1 |
|  | Male | 102 | 332 | 568.0 | 722 | 113.4 | 102 | 315 | 551.7 | 732 | 112.9 |
|  | Missing | 16 | 355 | 554.7 | 693 | 107.3 | 16 | 361 | 533.7 | 666 | 106.3 |
| Ethnicity | Asian | 45 | 355 | 607.8 | 722 | 76.7 | 45 | 361 | 592.2 | 732 | 84.4 |
|  | Black or African American | 49 | 380 | 564.3 | 722 | 85.6 | 49 | 394 | 544.1 | 732 | 85.3 |
|  | Hispanic or Latino | 64 | 332 | 517.8 | 722 | 118.9 | 64 | 315 | 503.9 | 732 | 114.7 |
|  | Native Hawaiian or Other Pacific Islander | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Two or More Races | 12 | 506 | 660.0 | 722 | 74.8 | 12 | 514 | 647.2 | 732 | 68.4 |
|  | White | 46 | 361 | 583.2 | 718 | 93.4 | 46 | 373 | 569.4 | 726 | 86.0 |
|  | Other/Unknown | 12 | 476 | 595.8 | 691 | 66.9 | 12 | 504 | 593.3 | 699 | 73.7 |
| Other | IEP | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.
* Domains with Exemption are excluded.

Table S1.13: Screener Scale Score Summary by Subgroup - Grade 12 (cont.)

| Subgroup | Status | Comprehension |  |  |  |  | Overall |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Min | Mean | Max | SD | N | Min | Mean | Max | SD |
| Total |  | 230 | 3787 | 5502.2 | 6524 | 682.5 | 230 | 3605 | 5580.2 | 6923 | 795.6 |
| Gender | Female | 112 | 4008 | 5545.9 | 6524 | 610.9 | 112 | 3771 | 5629.6 | 6923 | 686.3 |
|  | Male | 102 | 3787 | 5494.1 | 6524 | 758.8 | 102 | 3605 | 5557.6 | 6923 | 898.5 |
|  | Missing | 16 | 4174 | 5247.7 | 6081 | 624.8 | 16 | 3908 | 5378.8 | 6462 | 823.6 |
| Ethnicity | Asian | 45 | 4174 | 5778.8 | 6524 | 594.2 | 45 | 3908 | 5882.6 | 6923 | 641.6 |
|  | Black or African American | 49 | 4342 | 5436.3 | 6524 | 603.2 | 49 | 4351 | 5504.5 | 6923 | 675.0 |
|  | Hispanic or Latino | 64 | 3787 | 5129.3 | 6524 | 780.6 | 64 | 3605 | 5151.8 | 6923 | 921.8 |
|  | Native Hawaiian or Other Pacific Islander | 2 |  |  |  |  | 2 |  |  |  |  |
|  | Two or More Races | 12 | 5456 | 5956.9 | 6524 | 383.6 | 12 | 5248 | 6277.6 | 6923 | 535.2 |
|  | White | 46 | 4288 | 5658.2 | 6524 | 564.4 | 46 | 4028 | 5705.0 | 6869 | 689.2 |
|  | Other/Unknown | 12 | 5080 | 5655.4 | 6446 | 471.5 | 12 | 5057 | 5810.7 | 6461 | 500.9 |
| Other | IEP | 3 |  |  |  |  | 3 |  |  |  |  |
| Primary Disability | Other health impairment | 1 |  |  |  |  | 1 |  |  |  |  |
|  | Specific learning disability | 1 |  |  |  |  | 1 |  |  |  |  |

* Scale scores cannot be compared across grade bands.


## Section 2: Screener Assessment - Percentage of Students by Domain Performance Level

* Domains with Exemption or Not Attempted are excluded from counts, which only include tests assigned to domain performance levels 0-5.

Table S2.1: Screener Performance Level by Domain - Kindergarten

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 9,962 | 4.0 | 18.3 | 14.6 | 56.2 | 2.7 | 4.1 | 9,963 | 4.0 | 21.6 | 18.3 | 46.5 | 4.3 | 5.2 |
| Gender | Female | 4,491 | 3.6 | 17.6 | 14.0 | 57.6 | 3.0 | 4.3 | 4,493 | 3.6 | 20.4 | 17.6 | 48.1 | 4.7 | 5.6 |
|  | Male | 4,682 | 4.7 | 18.9 | 15.5 | 54.4 | 2.6 | 3.9 | 4,680 | 4.7 | 22.8 | 19.0 | 44.7 | 3.8 | 5.0 |
|  | Missing | 789 | 3.0 | 18.9 | 13.4 | 58.9 | 2.2 | 3.5 | 790 | 3.0 | 21.6 | 18.5 | 48.1 | 4.6 | 4.2 |
| Ethnicity | American Indian or Alaskan Native | 24 | 0.0 | 25.0 | 20.8 | 50.0 | 4.2 | 0.0 | 24 | 0.0 | 29.2 | 20.8 | 41.7 | 4.2 | 4.2 |
|  | Asian | 2,492 | 2.5 | 14.5 | 13.2 | 56.9 | 4.4 | 8.5 | 2,491 | 2.5 | 17.6 | 16.5 | 45.9 | 7.1 | 10.3 |
|  | Black or African American | 1,797 | 3.8 | 15.2 | 14.6 | 60.6 | 2.6 | 3.1 | 1,797 | 3.8 | 19.2 | 18.6 | 50.3 | 3.8 | 4.3 |
|  | Hispanic or Latino | 2,668 | 4.8 | 24.9 | 16.0 | 51.9 | 1.3 | 1.0 | 2,669 | 4.8 | 27.7 | 20.4 | 43.3 | 2.0 | 1.8 |
|  | Native Hawaiian or Other Pacific Islander | 46 | 4.3 | 13.0 | 8.7 | 65.2 | 4.3 | 4.3 | 46 | 4.3 | 13.0 | 15.2 | 54.3 | 6.5 | 6.5 |
|  | Two or More Races | 1,034 | 8.4 | 20.0 | 14.8 | 52.3 | 2.0 | 2.4 | 1,034 | 8.4 | 23.9 | 18.7 | 42.0 | 4.0 | 3.1 |
|  | White | 1,670 | 3.1 | 16.9 | 14.4 | 58.4 | 2.8 | 4.5 | 1,671 | 3.1 | 20.3 | 17.4 | 49.4 | 4.4 | 5.5 |
|  | Other/Unknown | 231 | 1.7 | 10.0 | 16.0 | 65.8 | 3.0 | 3.5 | 231 | 1.7 | 13.0 | 17.3 | 58.9 | 3.9 | 5.2 |
| Other | Gifted | 23 | 0.0 | 21.7 | 4.3 | 39.1 | 17.4 | 17.4 | 23 | 0.0 | 21.7 | 8.7 | 34.8 | 8.7 | 26.1 |
|  | IEP | 130 | 8.5 | 35.4 | 14.6 | 41.5 | 0.0 | 0.0 | 131 | 8.4 | 35.9 | 20.6 | 34.4 | 0.8 | 0.0 |
|  | Migrant | 9 | 0.0 | 22.2 | 11.1 | 66.7 | 0.0 | 0.0 | 9 | 0.0 | 22.2 | 22.2 | 55.6 | 0.0 | 0.0 |
| Primary Disability | Autism | 38 | 15.8 | 42.1 | 21.1 | 21.1 | 0.0 | 0.0 | 38 | 15.8 | 47.4 | 13.2 | 23.7 | 0.0 | 0.0 |
|  | Developmental delay | 5 | 0.0 | 40.0 | 0.0 | 60.0 | 0.0 | 0.0 | 5 | 0.0 | 40.0 | 0.0 | 60.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 2 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
|  | Intellectual Disability | 5 | 0.0 | 80.0 | 0.0 | 20.0 | 0.0 | 0.0 | 5 | 0.0 | 80.0 | 0.0 | 20.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 9 | 33.3 | 55.6 | 0.0 | 11.1 | 0.0 | 0.0 | 9 | 33.3 | 55.6 | 11.1 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 2 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 2 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 |
|  | Other health impairment | 7 | 14.3 | 28.6 | 14.3 | 42.9 | 0.0 | 0.0 | 7 | 14.3 | 14.3 | 28.6 | 42.9 | 0.0 | 0.0 |
|  | Specific learning disability | 7 | 0.0 | 42.9 | 57.1 | 0.0 | 0.0 | 0.0 | 7 | 0.0 | 28.6 | 71.4 | 0.0 | 0.0 | 0.0 |
|  | Speech or language impairment | 65 | 3.1 | 20.0 | 18.5 | 58.5 | 0.0 | 0.0 | 65 | 3.1 | 23.1 | 26.2 | 46.2 | 1.5 | 0.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.1: Screener Performance Level by Domain - Kindergarten (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 9,960 | 4.0 | 32.9 | 21.3 | 24.7 | 9.7 | 7.3 | 9,963 | 4.0 | 59.5 | 25.8 | 8.0 | 1.4 | 1.2 |
| Gender | Female | 4,491 | 3.6 | 30.9 | 20.4 | 26.4 | 10.5 | 8.2 | 4,493 | 3.6 | 59.3 | 26.4 | 8.0 | 1.3 | 1.4 |
|  | Male | 4,680 | 4.7 | 35.1 | 21.6 | 23.1 | 9.0 | 6.6 | 4,680 | 4.7 | 59.9 | 24.8 | 8.0 | 1.5 | 1.2 |
|  | Missing | 789 | 3.0 | 31.9 | 24.8 | 24.7 | 9.3 | 6.2 | 790 | 3.0 | 58.4 | 28.2 | 8.4 | 1.9 | 0.1 |
| Ethnicity | American Indian or Alaskan Native | 24 | 0.0 | 41.7 | 16.7 | 20.8 | 12.5 | 8.3 | 24 | 0.0 | 66.7 | 20.8 | 12.5 | 0.0 | 0.0 |
|  | Asian | 2,491 | 2.5 | 28.1 | 21.0 | 25.3 | 10.1 | 12.9 | 2,491 | 2.5 | 48.8 | 28.3 | 14.1 | 3.3 | 3.0 |
|  | Black or African American | 1,797 | 3.8 | 26.5 | 25.4 | 28.5 | 9.5 | 6.3 | 1,797 | 3.8 | 59.8 | 27.0 | 7.6 | 1.2 | 0.7 |
|  | Hispanic or Latino | 2,667 | 4.8 | 43.5 | 20.1 | 20.8 | 7.9 | 2.9 | 2,669 | 4.8 | 69.2 | 22.5 | 3.0 | 0.3 | 0.1 |
|  | Native Hawaiian or Other Pacific Islander | 46 | 4.3 | 19.6 | 32.6 | 26.1 | 8.7 | 8.7 | 46 | 4.3 | 56.5 | 30.4 | 8.7 | 0.0 | 0.0 |
|  | Two or More Races | 1,034 | 8.4 | 35.6 | 19.1 | 23.7 | 7.9 | 5.3 | 1,034 | 8.4 | 61.5 | 22.7 | 5.9 | 1.1 | 0.4 |
|  | White | 1,670 | 3.1 | 29.2 | 20.2 | 26.9 | 12.5 | 8.1 | 1,671 | 3.1 | 58.8 | 27.4 | 8.4 | 1.0 | 1.4 |
|  | Other/Unknown | 231 | 1.7 | 29.0 | 22.9 | 23.8 | 14.3 | 8.2 | 231 | 1.7 | 58.0 | 29.4 | 9.5 | 0.9 | 0.4 |
| Other | Gifted | 23 | 0.0 | 13.0 | 39.1 | 8.7 | 4.3 | 34.8 | 23 | 0.0 | 13.0 | 30.4 | 34.8 | 17.4 | 4.3 |
|  | IEP | 130 | 8.5 | 53.8 | 18.5 | 15.4 | 3.1 | 0.8 | 131 | 8.4 | 72.5 | 16.8 | 2.3 | 0.0 | 0.0 |
|  | Migrant | 9 | 0.0 | 77.8 | 11.1 | 11.1 | 0.0 | 0.0 | 9 | 0.0 | 77.8 | 11.1 | 11.1 | 0.0 | 0.0 |
| Primary Disability | Autism | 38 | 15.8 | 63.2 | 10.5 | 10.5 | 0.0 | 0.0 | 38 | 15.8 | 76.3 | 7.9 | 0.0 | 0.0 | 0.0 |
|  | Developmental delay | 5 | 0.0 | 40.0 | 40.0 | 0.0 | 20.0 | 0.0 | 5 | 0.0 | 40.0 | 40.0 | 20.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 2 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 3 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 5 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 9 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 0.0 | 9 | 33.3 | 55.6 | 11.1 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 2 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 7 | 14.3 | 42.9 | 42.9 | 0.0 | 0.0 | 0.0 | 7 | 14.3 | 71.4 | 14.3 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 7 | 0.0 | 57.1 | 28.6 | 14.3 | 0.0 | 0.0 | 7 | 0.0 | 85.7 | 14.3 | 0.0 | 0.0 | 0.0 |
|  | Speech or language impairment | 65 | 3.1 | 46.2 | 20.0 | 27.7 | 3.1 | 0.0 | 65 | 3.1 | 69.2 | 24.6 | 3.1 | 0.0 | 0.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.2: Screener Performance Level by Domain - Grade 1

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 1,610 | 5.3 | 23.4 | 6.7 | 31.6 | 12.7 | 20.2 | 1,610 | 5.3 | 46.8 | 11.4 | 17.1 | 8.0 | 11.4 |
| Gender | Female | 715 | 7.0 | 21.0 | 7.0 | 29.4 | 13.3 | 22.4 | 715 | 7.0 | 43.4 | 12.3 | 17.1 | 7.7 | 12.6 |
|  | Male | 756 | 4.5 | 26.2 | 6.5 | 32.7 | 11.8 | 18.4 | 756 | 4.5 | 49.6 | 9.9 | 17.7 | 8.1 | 10.2 |
|  | Missing | 139 | 1.4 | 20.9 | 6.5 | 37.4 | 14.4 | 19.4 | 139 | 1.4 | 49.6 | 14.4 | 13.7 | 9.4 | 11.5 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 3 | 0.0 | 0.0 | 33.3 | 33.3 | 33.3 | 0.0 |
|  | Asian | 454 | 0.9 | 13.9 | 5.5 | 27.3 | 15.0 | 37.4 | 454 | 0.9 | 31.9 | 9.7 | 20.0 | 13.2 | 24.2 |
|  | Black or African American | 275 | 4.4 | 15.6 | 6.2 | 40.7 | 18.5 | 14.5 | 275 | 4.4 | 41.8 | 16.0 | 21.5 | 6.9 | 9.5 |
|  | Hispanic or Latino | 428 | 9.3 | 36.2 | 6.5 | 30.8 | 7.5 | 9.6 | 428 | 9.3 | 63.1 | 9.8 | 11.0 | 2.8 | 4.0 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 0.0 | 20.0 | 10.0 | 40.0 | 10.0 | 20.0 | 10 | 0.0 | 60.0 | 10.0 | 20.0 | 10.0 | 0.0 |
|  | Two or More Races | 165 | 12.7 | 30.9 | 9.1 | 26.1 | 10.3 | 10.9 | 165 | 12.7 | 53.3 | 10.9 | 12.1 | 6.7 | 4.2 |
|  | White | 257 | 3.5 | 22.6 | 7.0 | 33.9 | 12.5 | 20.6 | 257 | 3.5 | 46.7 | 11.7 | 20.2 | 9.3 | 8.6 |
|  | Other/Unknown | 18 | 0.0 | 27.8 | 22.2 | 38.9 | 0.0 | 11.1 | 18 | 0.0 | 55.6 | 16.7 | 16.7 | 5.6 | 5.6 |
| Other | Gifted | 9 | 0.0 | 0.0 | 0.0 | 0.0 | 44.4 | 55.6 | 9 | 0.0 | 0.0 | 11.1 | 33.3 | 0.0 | 55.6 |
|  | IEP | 12 | 0.0 | 50.0 | 0.0 | 8.3 | 25.0 | 16.7 | 12 | 0.0 | 50.0 | 16.7 | 16.7 | 16.7 | 0.0 |
|  | Migrant | 7 | 0.0 | 42.9 | 0.0 | 57.1 | 0.0 | 0.0 | 7 | 0.0 | 85.7 | 14.3 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Autism | 4 | 25.0 | 50.0 | 0.0 | 0.0 | 25.0 | 0.0 | 4 | 25.0 | 25.0 | 0.0 | 25.0 | 25.0 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Orthopedic impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  |  |  | Reading |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | 0 | 1 | 2 | 3 | 4 | 5 | N |  | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Speech or language impairment |  | 5 | 0.0 | 0.0 |  | 20.0 | 40.0 | 40.0 |  | 5 | 0.0 | 20.0 | 40.0 | 20.0 | 20.0 | 0.0 |

* Domains with Exemption are excluded.

Level 0: Performance Not Determined.

Table S2.2: Screener Performance Level by Domain - Grade 1 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 1,610 | 5.3 | 55.3 | 17.5 | 3.6 | 5.7 | 12.6 | 1,610 | 5.3 | 53.9 | 12.3 | 15.3 | 4.8 | 8.4 |
| Gender | Female | 715 | 7.0 | 51.9 | 17.1 | 4.9 | 5.7 | 13.4 | 715 | 7.0 | 49.8 | 13.6 | 15.8 | 4.1 | 9.8 |
|  | Male | 756 | 4.5 | 59.5 | 16.7 | 2.1 | 5.6 | 11.6 | 756 | 4.5 | 57.7 | 10.6 | 14.8 | 5.7 | 6.7 |
|  | Missing | 139 | 1.4 | 49.6 | 23.7 | 5.0 | 6.5 | 13.7 | 139 | 1.4 | 54.7 | 15.1 | 15.1 | 3.6 | 10.1 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 | 3 | 0.0 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 |
|  | Asian | 454 | 0.9 | 43.6 | 17.4 | 5.3 | 8.1 | 24.7 | 454 | 0.9 | 37.2 | 13.2 | 21.6 | 9.3 | 17.8 |
|  | Black or African American | 275 | 4.4 | 54.5 | 22.2 | 2.9 | 4.0 | 12.0 | 275 | 4.4 | 52.7 | 17.1 | 14.5 | 4.4 | 6.9 |
|  | Hispanic or Latino | 428 | 9.3 | 66.1 | 14.0 | 1.9 | 4.4 | 4.2 | 428 | 9.3 | 68.5 | 8.4 | 9.1 | 1.9 | 2.8 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 0.0 | 80.0 | 10.0 | 0.0 | 0.0 | 10.0 | 10 | 0.0 | 70.0 | 10.0 | 10.0 | 10.0 | 0.0 |
|  | Two or More Races | 165 | 12.7 | 59.4 | 15.2 | 3.0 | 4.8 | 4.8 | 165 | 12.7 | 61.2 | 10.3 | 10.3 | 1.8 | 3.6 |
|  | White | 257 | 3.5 | 52.9 | 21.0 | 4.7 | 6.2 | 11.7 | 257 | 3.5 | 54.1 | 12.8 | 19.1 | 4.3 | 6.2 |
|  | Other/Unknown | 18 | 0.0 | 83.3 | 5.6 | 0.0 | 5.6 | 5.6 | 18 | 0.0 | 72.2 | 16.7 | 5.6 | 0.0 | 5.6 |
| Other | Gifted | 9 | 0.0 | 44.4 | 11.1 | 0.0 | 11.1 | 33.3 | 9 | 0.0 | 0.0 | 22.2 | 22.2 | 22.2 | 33.3 |
|  | IEP | 12 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 | 12 | 0.0 | 41.7 | 33.3 | 25.0 | 0.0 | 0.0 |
|  | Migrant | 7 | 0.0 | 71.4 | 28.6 | 0.0 | 0.0 | 0.0 | 7 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Autism | 4 | 25.0 | 75.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4 | 25.0 | 25.0 | 25.0 | 25.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Orthopedic impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  |  |  | Writing |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | 0 | 1 | 2 | 3 | 4 | 5 | N |  | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Speech or language impairment |  | 5 | 0.0 | 20.0 | 80.0 | 0.0 | 0.0 | 0.0 |  | 5 | 0.0 | 0.0 | 60.0 | 40.0 | 0.0 | 0.0 |

* Domains with Exemption are excluded.

Level 0: Performance Not Determined.

Table S2.3: Screener Performance Level by Domain-Grade 2

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 1,234 | 6.1 | 22.7 | 9.8 | 24.1 | 19.2 | 18.2 | 1,235 | 6.1 | 45.5 | 8.0 | 21.4 | 8.7 | 10.3 |
| Gender | Female | 514 | 6.6 | 20.4 | 9.3 | 21.8 | 21.0 | 20.8 | 515 | 6.6 | 41.4 | 8.7 | 23.3 | 7.8 | 12.2 |
|  | Male | 635 | 6.3 | 25.4 | 9.6 | 25.2 | 17.0 | 16.5 | 635 | 6.3 | 49.0 | 7.1 | 19.5 | 9.6 | 8.5 |
|  | Missing | 85 | 1.2 | 16.5 | 14.1 | 29.4 | 24.7 | 14.1 | 85 | 1.2 | 44.7 | 10.6 | 23.5 | 8.2 | 11.8 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 3 | 0.0 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 |
|  | Asian | 283 | 1.4 | 16.6 | 10.6 | 25.4 | 17.7 | 28.3 | 284 | 1.4 | 38.7 | 8.8 | 22.2 | 9.2 | 19.7 |
|  | Black or African American | 230 | 3.0 | 14.3 | 8.3 | 23.9 | 28.7 | 21.7 | 230 | 3.0 | 36.1 | 8.3 | 28.3 | 13.0 | 11.3 |
|  | Hispanic or Latino | 353 | 11.6 | 31.7 | 9.9 | 23.2 | 14.7 | 8.8 | 353 | 11.6 | 55.8 | 7.4 | 16.4 | 5.9 | 2.8 |
|  | Native Hawaiian or Other Pacific Islander | 8 | 0.0 | 37.5 | 0.0 | 12.5 | 25.0 | 25.0 | 8 | 0.0 | 37.5 | 12.5 | 37.5 | 0.0 | 12.5 |
|  | Two or More Races | 144 | 13.2 | 28.5 | 9.0 | 23.6 | 14.6 | 11.1 | 144 | 13.2 | 50.7 | 6.9 | 18.8 | 5.6 | 4.9 |
|  | White | 195 | 2.1 | 20.0 | 10.8 | 25.1 | 21.5 | 20.5 | 195 | 2.1 | 44.1 | 8.7 | 22.6 | 10.3 | 12.3 |
|  | Other/Unknown | 18 | 0.0 | 27.8 | 16.7 | 22.2 | 5.6 | 27.8 | 18 | 0.0 | 55.6 | 5.6 | 11.1 | 11.1 | 16.7 |
| Other | Gifted | 19 | 0.0 | 0.0 | 10.5 | 0.0 | 31.6 | 57.9 | 19 | 0.0 | 5.3 | 0.0 | 36.8 | 21.1 | 36.8 |
|  | IEP | 8 | 12.5 | 12.5 | 12.5 | 50.0 | 12.5 | 0.0 | 9 | 11.1 | 44.4 | 11.1 | 33.3 | 0.0 | 0.0 |
|  | Migrant | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
| Primary Disability | Autism | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 0 |  |  |  |  |  |  | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Speech or language impairment | 4 | 0.0 | 25.0 | 0.0 | 50.0 | 25.0 | 0.0 | 4 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.3: Screener Performance Level by Domain - Grade 2 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 1,234 | 6.1 | 52.2 | 13.0 | 8.1 | 7.9 | 12.8 | 1,235 | 6.1 | 44.9 | 11.5 | 18.3 | 7.9 | 11.3 |
| Gender | Female | 514 | 6.6 | 48.8 | 12.1 | 9.7 | 8.4 | 14.4 | 515 | 6.6 | 41.9 | 11.8 | 18.4 | 8.7 | 12.4 |
|  | Male | 635 | 6.3 | 55.0 | 13.2 | 7.2 | 7.6 | 10.7 | 635 | 6.3 | 47.4 | 11.2 | 17.6 | 7.2 | 10.2 |
|  | Missing | 85 | 1.2 | 51.8 | 16.5 | 4.7 | 7.1 | 18.8 | 85 | 1.2 | 44.7 | 11.8 | 22.4 | 8.2 | 11.8 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 33.3 | 66.7 | 0.0 | 0.0 | 0.0 | 3 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 |
|  | Asian | 283 | 1.4 | 52.3 | 9.9 | 7.1 | 9.2 | 20.1 | 284 | 1.4 | 38.4 | 11.3 | 18.0 | 11.6 | 19.4 |
|  | Black or African American | 230 | 3.0 | 41.7 | 19.6 | 10.4 | 10.4 | 14.8 | 230 | 3.0 | 34.3 | 13.9 | 25.7 | 10.4 | 12.6 |
|  | Hispanic or Latino | 353 | 11.6 | 58.4 | 11.3 | 6.5 | 5.7 | 6.5 | 353 | 11.6 | 56.1 | 9.3 | 13.6 | 5.4 | 4.0 |
|  | Native Hawaiian or Other Pacific Islander | 8 | 0.0 | 37.5 | 37.5 | 12.5 | 0.0 | 12.5 | 8 | 0.0 | 37.5 | 12.5 | 25.0 | 12.5 | 12.5 |
|  | Two or More Races | 144 | 13.2 | 55.6 | 10.4 | 8.3 | 6.9 | 5.6 | 144 | 13.2 | 50.0 | 9.0 | 18.1 | 3.5 | 6.3 |
|  | White | 195 | 2.1 | 50.3 | 13.3 | 10.3 | 8.2 | 15.9 | 195 | 2.1 | 43.1 | 14.4 | 19.0 | 7.2 | 14.4 |
|  | Other/Unknown | 18 | 0.0 | 66.7 | 5.6 | 0.0 | 5.6 | 22.2 | 18 | 0.0 | 55.6 | 5.6 | 11.1 | 11.1 | 16.7 |
| Other | Gifted | 19 | 0.0 | 47.4 | 10.5 | 10.5 | 21.1 | 10.5 | 19 | 0.0 | 5.3 | 5.3 | 26.3 | 15.8 | 47.4 |
|  | IEP | 8 | 12.5 | 62.5 | 0.0 | 12.5 | 12.5 | 0.0 | 9 | 11.1 | 33.3 | 22.2 | 22.2 | 11.1 | 0.0 |
|  | Migrant | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Autism | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 0 |  |  |  |  |  |  | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Speech or language impairment | 4 | 0.0 | 50.0 | 0.0 | 25.0 | 25.0 | 0.0 | 4 | 0.0 | 50.0 | 0.0 | 25.0 | 25.0 | 0.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.4: Screener Performance Level by Domain - Grade 3

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 1,076 | 6.9 | 22.0 | 12.4 | 20.0 | 19.7 | 19.1 | 1,075 | 6.9 | 45.7 | 13.6 | 16.9 | 6.3 | 10.6 |
| Gender | Female | 478 | 7.9 | 19.2 | 11.5 | 20.1 | 19.2 | 22.0 | 477 | 8.0 | 41.9 | 12.8 | 18.4 | 6.7 | 12.2 |
|  | Male | 528 | 6.6 | 22.9 | 13.3 | 20.6 | 20.3 | 16.3 | 528 | 6.6 | 47.3 | 15.0 | 15.9 | 5.7 | 9.5 |
|  | Missing | 70 | 1.4 | 34.3 | 11.4 | 14.3 | 18.6 | 20.0 | 70 | 1.4 | 58.6 | 8.6 | 14.3 | 8.6 | 8.6 |
| Ethnicity | American Indian or Alaskan Native | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 | 2 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 |
|  | Asian | 228 | 1.3 | 11.0 | 11.0 | 19.3 | 21.1 | 36.4 | 228 | 1.3 | 32.9 | 12.3 | 18.9 | 12.3 | 22.4 |
|  | Black or African American | 216 | 6.9 | 22.2 | 10.2 | 19.9 | 25.5 | 15.3 | 216 | 6.9 | 43.5 | 14.8 | 21.3 | 7.9 | 5.6 |
|  | Hispanic or Latino | 318 | 11.0 | 30.5 | 14.8 | 16.7 | 16.0 | 11.0 | 318 | 11.0 | 54.7 | 11.3 | 14.8 | 2.5 | 5.7 |
|  | Native Hawaiian or Other Pacific Islander | 6 | 0.0 | 16.7 | 0.0 | 50.0 | 33.3 | 0.0 | 6 | 0.0 | 33.3 | 16.7 | 50.0 | 0.0 | 0.0 |
|  | Two or More Races | 146 | 9.6 | 24.7 | 13.7 | 24.0 | 15.8 | 12.3 | 145 | 9.7 | 55.9 | 11.0 | 14.5 | 4.8 | 4.1 |
|  | White | 145 | 4.8 | 19.3 | 11.7 | 22.1 | 17.9 | 24.1 | 145 | 4.8 | 41.4 | 19.3 | 11.0 | 4.8 | 18.6 |
|  | Other/Unknown | 15 | 0.0 | 13.3 | 13.3 | 33.3 | 40.0 | 0.0 | 15 | 0.0 | 33.3 | 26.7 | 40.0 | 0.0 | 0.0 |
| Other | Gifted | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 33.3 | 66.7 |
|  | IEP | 8 | 12.5 | 12.5 | 12.5 | 62.5 | 0.0 | 0.0 | 7 | 14.3 | 57.1 | 28.6 | 0.0 | 0.0 | 0.0 |
|  | Migrant | 3 | 0.0 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Autism | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0 |  |  |  |  |  |  |
|  | Other health impairment | 3 | 0.0 | 33.3 | 0.0 | 33.3 | 33.3 | 0.0 | 3 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  |  |  | Reading |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | 0 | 1 | 2 | 3 | 4 | 5 | N |  | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Speech or language impairment |  | 2 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |  | 2 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |

* Domains with Exemption are excluded.

Level 0: Performance Not Determined.

Table S2.4: Screener Performance Level by Domain - Grade 3 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 1,075 | 6.9 | 48.0 | 9.9 | 8.7 | 9.4 | 17.2 | 1,075 | 6.9 | 47.2 | 12.7 | 14.3 | 6.0 | 12.8 |
| Gender | Female | 477 | 8.0 | 44.4 | 9.2 | 8.8 | 9.9 | 19.7 | 477 | 8.0 | 43.4 | 11.9 | 14.9 | 6.7 | 15.1 |
|  | Male | 528 | 6.6 | 50.6 | 11.0 | 7.8 | 9.1 | 15.0 | 528 | 6.6 | 49.1 | 14.2 | 13.6 | 5.5 | 11.0 |
|  | Missing | 70 | 1.4 | 52.9 | 5.7 | 14.3 | 8.6 | 17.1 | 70 | 1.4 | 58.6 | 7.1 | 15.7 | 5.7 | 11.4 |
| Ethnicity | American Indian or Alaskan Native | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 50.0 |
|  | Asian | 228 | 1.3 | 37.3 | 8.8 | 8.3 | 10.5 | 33.8 | 228 | 1.3 | 32.5 | 14.9 | 15.4 | 9.2 | 26.8 |
|  | Black or African American | 216 | 6.9 | 44.0 | 13.9 | 11.1 | 11.1 | 13.0 | 216 | 6.9 | 45.8 | 13.9 | 16.7 | 8.8 | 7.9 |
|  | Hispanic or Latino | 318 | 11.0 | 58.2 | 7.2 | 5.0 | 8.5 | 10.1 | 318 | 11.0 | 56.6 | 8.8 | 13.5 | 3.8 | 6.3 |
|  | Native Hawaiian or Other Pacific Islander | 6 | 0.0 | 50.0 | 0.0 | 33.3 | 0.0 | 16.7 | 6 | 0.0 | 50.0 | 16.7 | 33.3 | 0.0 | 0.0 |
|  | Two or More Races | 145 | 9.7 | 53.1 | 11.7 | 8.3 | 8.3 | 9.0 | 145 | 9.7 | 56.6 | 10.3 | 11.7 | 4.8 | 6.9 |
|  | White | 145 | 4.8 | 46.2 | 8.3 | 12.4 | 6.9 | 21.4 | 145 | 4.8 | 44.1 | 15.9 | 11.7 | 3.4 | 20.0 |
|  | Other/Unknown | 15 | 0.0 | 26.7 | 26.7 | 13.3 | 20.0 | 13.3 | 15 | 0.0 | 26.7 | 40.0 | 26.7 | 6.7 | 0.0 |
| Other | Gifted | 3 | 0.0 | 0.0 | 0.0 | 33.3 | 0.0 | 66.7 | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 33.3 | 66.7 |
|  | IEP | 7 | 14.3 | 57.1 | 28.6 | 0.0 | 0.0 | 0.0 | 7 | 14.3 | 57.1 | 14.3 | 14.3 | 0.0 | 0.0 |
|  | Migrant | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Autism | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Other health impairment | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 | 3 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  |  |  | Writing |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | 0 | 1 | 2 | 3 | 4 | 5 | N |  | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Speech or language impairment |  | 2 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |  | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 |

* Domains with Exemption are excluded.

Level 0: Performance Not Determined.

Table S2.5: Screener Performance Level by Domain - Grade 4

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 910 | 8.9 | 26.4 | 6.7 | 11.3 | 17.0 | 29.7 | 910 | 8.9 | 38.2 | 8.1 | 13.2 | 9.9 | 21.6 |
| Gender | Female | 415 | 8.7 | 24.1 | 5.3 | 9.9 | 18.1 | 34.0 | 415 | 8.7 | 33.7 | 9.2 | 13.3 | 10.8 | 24.3 |
|  | Male | 431 | 9.3 | 29.2 | 7.9 | 12.3 | 16.2 | 25.1 | 431 | 9.3 | 42.2 | 7.7 | 13.2 | 9.3 | 18.3 |
|  | Missing | 64 | 7.8 | 21.9 | 7.8 | 14.1 | 15.6 | 32.8 | 64 | 7.8 | 40.6 | 4.7 | 12.5 | 7.8 | 26.6 |
| Ethnicity | American Indian or Alaskan Native | 5 | 20.0 | 0.0 | 20.0 | 20.0 | 20.0 | 20.0 | 5 | 20.0 | 40.0 | 0.0 | 0.0 | 20.0 | 20.0 |
|  | Asian | 185 | 2.2 | 9.2 | 7.6 | 15.1 | 20.0 | 45.9 | 186 | 2.2 | 23.1 | 14.0 | 10.2 | 14.0 | 36.6 |
|  | Black or African American | 170 | 6.5 | 15.3 | 8.8 | 13.5 | 21.8 | 34.1 | 170 | 6.5 | 29.4 | 7.1 | 22.4 | 12.9 | 21.8 |
|  | Hispanic or Latino | 281 | 13.9 | 39.1 | 5.7 | 8.5 | 14.6 | 18.1 | 281 | 13.9 | 49.1 | 6.4 | 12.1 | 7.1 | 11.4 |
|  | Native Hawaiian or Other Pacific Islander | 5 | 0.0 | 40.0 | 0.0 | 0.0 | 20.0 | 40.0 | 5 | 0.0 | 40.0 | 0.0 | 20.0 | 20.0 | 20.0 |
|  | Two or More Races | 119 | 12.6 | 37.8 | 3.4 | 9.2 | 16.8 | 20.2 | 118 | 12.7 | 44.9 | 5.1 | 12.7 | 8.5 | 16.1 |
|  | White | 132 | 8.3 | 28.8 | 6.8 | 9.1 | 12.1 | 34.8 | 132 | 8.3 | 40.2 | 8.3 | 8.3 | 7.6 | 27.3 |
|  | Other/Unknown | 13 | 0.0 | 15.4 | 15.4 | 30.8 | 15.4 | 23.1 | 13 | 0.0 | 53.8 | 7.7 | 15.4 | 0.0 | 23.1 |
| Other | Gifted | 6 | 0.0 | 16.7 | 0.0 | 0.0 | 16.7 | 66.7 | 6 | 0.0 | 16.7 | 0.0 | 16.7 | 0.0 | 66.7 |
|  | IEP | 10 | 30.0 | 20.0 | 0.0 | 10.0 | 20.0 | 20.0 | 10 | 30.0 | 20.0 | 0.0 | 20.0 | 20.0 | 10.0 |
|  | Migrant | 3 | 0.0 | 66.7 | 0.0 | 0.0 | 0.0 | 33.3 | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Autism | 3 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 | 0.0 | 2 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 0 |  |  |  |  |  |  | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
|  | Intellectual Disability | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N |  | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |  | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | Other health impairment | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |  | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 50.0 |  | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |
|  | Speech or language impairment | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |  | 2 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.5: Screener Performance Level by Domain - Grade 4 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 909 | 8.9 | 36.9 | 7.9 | 8.7 | 4.6 | 33.0 | 910 | 8.9 | 36.0 | 7.0 | 18.4 | 7.3 | 22.4 |
| Gender | Female | 415 | 8.7 | 34.0 | 5.8 | 9.4 | 3.9 | 38.3 | 415 | 8.7 | 32.5 | 5.1 | 20.5 | 8.9 | 24.3 |
|  | Male | 430 | 9.3 | 40.0 | 9.8 | 8.1 | 5.3 | 27.4 | 431 | 9.3 | 39.7 | 8.4 | 16.9 | 5.8 | 20.0 |
|  | Missing | 64 | 7.8 | 34.4 | 9.4 | 7.8 | 4.7 | 35.9 | 64 | 7.8 | 34.4 | 10.9 | 14.1 | 6.3 | 26.6 |
| Ethnicity | American Indian or Alaskan Native | 5 | 20.0 | 20.0 | 20.0 | 20.0 | 0.0 | 20.0 | 5 | 20.0 | 20.0 | 20.0 | 20.0 | 0.0 | 20.0 |
|  | Asian | 185 | 2.2 | 24.9 | 7.0 | 10.8 | 2.7 | 52.4 | 186 | 2.2 | 19.9 | 9.7 | 23.1 | 7.5 | 37.6 |
|  | Black or African American | 170 | 6.5 | 25.3 | 13.5 | 9.4 | 8.8 | 36.5 | 170 | 6.5 | 27.6 | 6.5 | 24.7 | 12.9 | 21.8 |
|  | Hispanic or Latino | 281 | 13.9 | 47.3 | 6.4 | 7.8 | 3.9 | 20.6 | 281 | 13.9 | 46.6 | 6.4 | 15.7 | 6.0 | 11.4 |
|  | Native Hawaiian or Other Pacific Islander | 5 | 0.0 | 40.0 | 0.0 | 0.0 | 0.0 | 60.0 | 5 | 0.0 | 40.0 | 0.0 | 20.0 | 20.0 | 20.0 |
|  | Two or More Races | 118 | 12.7 | 45.8 | 3.4 | 5.9 | 5.9 | 26.3 | 118 | 12.7 | 44.1 | 5.9 | 15.3 | 5.9 | 16.1 |
|  | White | 132 | 8.3 | 37.9 | 8.3 | 9.1 | 2.3 | 34.1 | 132 | 8.3 | 40.2 | 3.8 | 12.9 | 3.8 | 31.1 |
|  | Other/Unknown | 13 | 0.0 | 46.2 | 15.4 | 7.7 | 7.7 | 23.1 | 13 | 0.0 | 38.5 | 30.8 | 7.7 | 0.0 | 23.1 |
| Other | Gifted | 6 | 0.0 | 16.7 | 16.7 | 0.0 | 16.7 | 50.0 | 6 | 0.0 | 16.7 | 0.0 | 16.7 | 16.7 | 50.0 |
|  | IEP | 9 | 33.3 | 22.2 | 0.0 | 0.0 | 22.2 | 22.2 | 10 | 30.0 | 20.0 | 0.0 | 20.0 | 20.0 | 10.0 |
|  | Migrant | 3 | 0.0 | 66.7 | 0.0 | 0.0 | 0.0 | 33.3 | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Autism | 2 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 0 |  |  |  |  |  |  | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |
|  | Intellectual Disability | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N |  | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Orthopedic impairment | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |  | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | Other health impairment | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |  | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |  | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |
|  | Speech or language impairment | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 |  | 2 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.6: Screener Performance Level by Domain - Grade 5

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 912 | 8.6 | 27.5 | 6.4 | 9.1 | 19.8 | 28.6 | 912 | 8.6 | 37.9 | 12.2 | 14.1 | 7.3 | 19.8 |
| Gender | Female | 400 | 9.3 | 26.5 | 6.3 | 10.8 | 18.5 | 28.8 | 400 | 9.3 | 37.0 | 13.5 | 12.5 | 6.3 | 21.5 |
|  | Male | 456 | 8.3 | 27.6 | 6.8 | 7.7 | 20.8 | 28.7 | 456 | 8.3 | 38.4 | 11.4 | 15.1 | 8.6 | 18.2 |
|  | Missing | 56 | 5.4 | 33.9 | 3.6 | 8.9 | 21.4 | 26.8 | 56 | 5.4 | 41.1 | 8.9 | 17.9 | 5.4 | 21.4 |
| Ethnicity | American Indian or Alaskan Native | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 179 | 2.8 | 14.0 | 8.9 | 10.1 | 25.1 | 39.1 | 179 | 2.8 | 27.4 | 14.5 | 17.3 | 7.3 | 30.7 |
|  | Black or African American | 183 | 7.7 | 21.9 | 8.7 | 13.1 | 20.2 | 28.4 | 183 | 7.7 | 36.6 | 14.2 | 14.2 | 7.7 | 19.7 |
|  | Hispanic or Latino | 264 | 15.9 | 35.6 | 5.7 | 7.2 | 18.2 | 17.4 | 264 | 15.9 | 44.7 | 10.2 | 13.6 | 6.4 | 9.1 |
|  | Native Hawaiian or Other Pacific Islander | 8 | 12.5 | 25.0 | 12.5 | 12.5 | 25.0 | 12.5 | 8 | 12.5 | 37.5 | 0.0 | 37.5 | 0.0 | 12.5 |
|  | Two or More Races | 119 | 8.4 | 31.1 | 1.7 | 2.5 | 21.0 | 35.3 | 119 | 8.4 | 35.3 | 8.4 | 15.1 | 14.3 | 18.5 |
|  | White | 150 | 3.3 | 32.7 | 4.7 | 12.0 | 15.3 | 32.0 | 150 | 3.3 | 42.0 | 14.0 | 9.3 | 4.0 | 27.3 |
|  | Other/Unknown | 8 | 12.5 | 37.5 | 12.5 | 0.0 | 12.5 | 25.0 | 8 | 12.5 | 37.5 | 12.5 | 12.5 | 0.0 | 25.0 |
| Other | Gifted | 8 | 0.0 | 0.0 | 25.0 | 0.0 | 12.5 | 62.5 | 8 | 0.0 | 12.5 | 12.5 | 12.5 | 0.0 | 62.5 |
|  | IEP | 6 | 0.0 | 33.3 | 0.0 | 16.7 | 33.3 | 16.7 | 6 | 0.0 | 50.0 | 16.7 | 0.0 | 33.3 | 0.0 |
|  | Migrant | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Primary Disability | Developmental delay | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Emotional disturbance | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 50.0 | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |
|  | Intellectual Disability | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Multiple disabilities | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  |  |  | Reading |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | 0 | 1 | 2 | 3 | 4 | 5 | N |  | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Specific learning disability |  | 2 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 |  | 2 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 |

excluded.

* Level 0: Performance Not Determined.

Table S2.6: Screener Performance Level by Domain - Grade 5 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 912 | 8.6 | 37.7 | 9.1 | 7.5 | 5.8 | 31.4 | 912 | 8.6 | 32.1 | 9.5 | 23.2 | 5.7 | 20.8 |
| Gender | Female | 400 | 9.3 | 37.8 | 9.8 | 6.5 | 6.3 | 30.5 | 400 | 9.3 | 30.5 | 9.5 | 23.0 | 5.5 | 22.3 |
|  | Male | 456 | 8.3 | 37.7 | 8.6 | 7.7 | 5.5 | 32.2 | 456 | 8.3 | 33.1 | 9.6 | 23.5 | 5.7 | 19.7 |
|  | Missing | 56 | 5.4 | 37.5 | 8.9 | 12.5 | 5.4 | 30.4 | 56 | 5.4 | 35.7 | 8.9 | 23.2 | 7.1 | 19.6 |
| Ethnicity | American Indian or Alaskan Native | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 179 | 2.8 | 29.6 | 13.4 | 5.0 | 7.8 | 41.3 | 179 | 2.8 | 21.2 | 10.1 | 29.1 | 5.0 | 31.8 |
|  | Black or African American | 183 | 7.7 | 32.8 | 13.7 | 11.5 | 3.3 | 31.1 | 183 | 7.7 | 30.6 | 13.7 | 22.4 | 4.4 | 21.3 |
|  | Hispanic or Latino | 264 | 15.9 | 44.7 | 6.4 | 4.9 | 6.1 | 22.0 | 264 | 15.9 | 39.4 | 9.1 | 20.5 | 5.3 | 9.8 |
|  | Native Hawaiian or Other Pacific Islander | 8 | 12.5 | 25.0 | 12.5 | 12.5 | 12.5 | 25.0 | 8 | 12.5 | 25.0 | 12.5 | 25.0 | 12.5 | 12.5 |
|  | Two or More Races | 119 | 8.4 | 35.3 | 5.0 | 8.4 | 6.7 | 36.1 | 119 | 8.4 | 31.1 | 6.7 | 21.8 | 12.6 | 19.3 |
|  | White | 150 | 3.3 | 43.3 | 6.7 | 8.0 | 5.3 | 33.3 | 150 | 3.3 | 34.7 | 7.3 | 23.3 | 3.3 | 28.0 |
|  | Other/Unknown | 8 | 12.5 | 37.5 | 0.0 | 25.0 | 0.0 | 25.0 | 8 | 12.5 | 37.5 | 0.0 | 25.0 | 0.0 | 25.0 |
| Other | Gifted | 8 | 0.0 | 0.0 | 12.5 | 37.5 | 12.5 | 37.5 | 8 | 0.0 | 12.5 | 0.0 | 25.0 | 0.0 | 62.5 |
|  | IEP | 6 | 0.0 | 50.0 | 0.0 | 16.7 | 0.0 | 33.3 | 6 | 0.0 | 50.0 | 0.0 | 16.7 | 33.3 | 0.0 |
|  | Migrant | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
| Primary Disability | Developmental delay | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Emotional disturbance | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 50.0 | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 |
|  | Intellectual Disability | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Multiple disabilities | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  |  |  | Writing |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N |  | 0 | 1 | 2 | 3 | 4 | 5 | N |  | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Specific learning disability |  | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 50.0 |  | 2 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |

* Domains with Exemption are excluded.

Level 0: Performance Not Determined.

Table S2.7: Screener Performance Level by Domain - Grade 6

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 771 | 12.5 | 23.7 | 7.4 | 11.7 | 16.5 | 28.3 | 771 | 12.5 | 35.3 | 5.6 | 18.8 | 7.7 | 20.2 |
| Gender | Female | 342 | 12.9 | 21.9 | 6.7 | 11.4 | 14.6 | 32.5 | 342 | 12.9 | 31.3 | 6.1 | 18.4 | 8.5 | 22.8 |
|  | Male | 369 | 12.7 | 24.7 | 8.1 | 11.4 | 17.6 | 25.5 | 369 | 12.7 | 38.5 | 4.3 | 18.7 | 7.0 | 18.7 |
|  | Missing | 60 | 8.3 | 28.3 | 6.7 | 15.0 | 20.0 | 21.7 | 60 | 8.3 | 38.3 | 10.0 | 21.7 | 6.7 | 15.0 |
| Ethnicity | American Indian or Alaskan Native | 4 | 0.0 | 25.0 | 0.0 | 25.0 | 25.0 | 25.0 | 4 | 0.0 | 25.0 | 0.0 | 50.0 | 0.0 | 25.0 |
|  | Asian | 129 | 3.1 | 11.6 | 7.8 | 11.6 | 12.4 | 53.5 | 129 | 3.1 | 24.8 | 4.7 | 14.7 | 7.8 | 45.0 |
|  | Black or African American | 166 | 11.4 | 19.3 | 8.4 | 16.3 | 15.7 | 28.9 | 166 | 11.4 | 34.9 | 5.4 | 20.5 | 10.8 | 16.9 |
|  | Hispanic or Latino | 282 | 18.4 | 30.9 | 6.7 | 8.9 | 18.1 | 17.0 | 282 | 18.4 | 40.1 | 5.7 | 19.5 | 5.7 | 10.6 |
|  | Native Hawaiian or Other Pacific Islander | 2 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | 2 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |
|  | Two or More Races | 66 | 18.2 | 27.3 | 6.1 | 10.6 | 19.7 | 18.2 | 66 | 18.2 | 40.9 | 3.0 | 18.2 | 9.1 | 10.6 |
|  | White | 112 | 7.1 | 24.1 | 8.0 | 11.6 | 14.3 | 34.8 | 112 | 7.1 | 33.0 | 8.0 | 16.1 | 8.0 | 27.7 |
|  | Other/Unknown | 10 | 10.0 | 20.0 | 10.0 | 20.0 | 30.0 | 10.0 | 10 | 10.0 | 30.0 | 10.0 | 40.0 | 0.0 | 10.0 |
| Other | Gifted | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 4 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 |
|  | IEP | 5 | 0.0 | 20.0 | 0.0 | 20.0 | 60.0 | 0.0 | 5 | 0.0 | 40.0 | 0.0 | 60.0 | 0.0 | 0.0 |
|  | Migrant | 4 | 0.0 | 0.0 | 25.0 | 0.0 | 50.0 | 25.0 | 4 | 0.0 | 25.0 | 0.0 | 50.0 | 0.0 | 25.0 |
| Primary Disability | Autism | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Specific learning disability | 3 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 3 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |

[^14]Table S2.7: Screener Performance Level by Domain - Grade 6 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 771 | 12.5 | 30.4 | 8.8 | 14.8 | 5.3 | 28.3 | 771 | 12.5 | 27.9 | 9.5 | 21.5 | 4.9 | 23.7 |
| Gender | Female | 342 | 12.9 | 27.2 | 9.6 | 12.3 | 6.4 | 31.6 | 342 | 12.9 | 25.7 | 9.6 | 18.4 | 6.1 | 27.2 |
|  | Male | 369 | 12.7 | 32.8 | 7.9 | 16.3 | 4.1 | 26.3 | 369 | 12.7 | 29.5 | 9.2 | 23.3 | 4.3 | 20.9 |
|  | Missing | 60 | 8.3 | 33.3 | 10.0 | 20.0 | 6.7 | 21.7 | 60 | 8.3 | 30.0 | 10.0 | 28.3 | 1.7 | 21.7 |
| Ethnicity | American Indian or Alaskan Native | 4 | 0.0 | 25.0 | 0.0 | 50.0 | 0.0 | 25.0 | 4 | 0.0 | 25.0 | 25.0 | 25.0 | 0.0 | 25.0 |
|  | Asian | 129 | 3.1 | 17.1 | 12.4 | 12.4 | 5.4 | 49.6 | 129 | 3.1 | 14.7 | 11.6 | 18.6 | 3.1 | 48.8 |
|  | Black or African American | 166 | 11.4 | 24.7 | 9.6 | 21.7 | 4.2 | 28.3 | 166 | 11.4 | 27.1 | 10.8 | 22.3 | 7.2 | 21.1 |
|  | Hispanic or Latino | 282 | 18.4 | 37.6 | 7.8 | 11.7 | 6.7 | 17.7 | 282 | 18.4 | 34.0 | 7.8 | 22.0 | 4.6 | 13.1 |
|  | Native Hawaiian or Other Pacific Islander | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 2 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |
|  | Two or More Races | 66 | 18.2 | 34.8 | 4.5 | 13.6 | 9.1 | 19.7 | 66 | 18.2 | 30.3 | 9.1 | 21.2 | 4.5 | 16.7 |
|  | White | 112 | 7.1 | 33.9 | 6.3 | 14.3 | 1.8 | 36.6 | 112 | 7.1 | 26.8 | 9.8 | 20.5 | 4.5 | 31.3 |
|  | Other/Unknown | 10 | 10.0 | 30.0 | 30.0 | 10.0 | 0.0 | 20.0 | 10 | 10.0 | 30.0 | 0.0 | 40.0 | 10.0 | 10.0 |
| Other | Gifted | 4 | 0.0 | 0.0 | 25.0 | 25.0 | 0.0 | 50.0 | 4 | 0.0 | 0.0 | 0.0 | 25.0 | 25.0 | 50.0 |
|  | IEP | 5 | 0.0 | 20.0 | 0.0 | 60.0 | 20.0 | 0.0 | 5 | 0.0 | 20.0 | 20.0 | 60.0 | 0.0 | 0.0 |
|  | Migrant | 4 | 0.0 | 25.0 | 0.0 | 0.0 | 75.0 | 0.0 | 4 | 0.0 | 25.0 | 0.0 | 25.0 | 25.0 | 25.0 |
| Primary Disability | Autism | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Specific learning disability | 3 | 0.0 | 0.0 | 0.0 | 66.7 | 33.3 | 0.0 | 3 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |

[^15]Table S2.8: Screener Performance Level by Domain - Grade 7

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 829 | 18.8 | 31.1 | 6.9 | 13.3 | 7.2 | 22.7 | 829 | 18.8 | 39.4 | 7.8 | 12.9 | 7.2 | 13.8 |
| Gender | Female | 392 | 19.1 | 28.6 | 7.7 | 13.8 | 5.6 | 25.3 | 392 | 19.1 | 38.0 | 7.7 | 11.7 | 8.7 | 14.8 |
|  | Male | 393 | 19.1 | 33.6 | 6.6 | 12.7 | 8.4 | 19.6 | 393 | 19.1 | 41.2 | 8.1 | 13.7 | 5.3 | 12.5 |
|  | Missing | 44 | 13.6 | 31.8 | 2.3 | 13.6 | 11.4 | 27.3 | 44 | 13.6 | 36.4 | 6.8 | 15.9 | 11.4 | 15.9 |
| Ethnicity | American Indian or Alaskan Native | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 123 | 1.6 | 15.4 | 9.8 | 22.8 | 9.8 | 40.7 | 123 | 1.6 | 27.6 | 10.6 | 18.7 | 8.1 | 33.3 |
|  | Black or African American | 155 | 11.6 | 25.8 | 9.0 | 16.8 | 7.7 | 29.0 | 155 | 11.6 | 37.4 | 10.3 | 15.5 | 11.6 | 13.5 |
|  | Hispanic or Latino | 327 | 32.1 | 36.4 | 6.1 | 7.6 | 5.8 | 11.9 | 327 | 32.1 | 43.4 | 5.2 | 8.9 | 4.9 | 5.5 |
|  | Native Hawaiian or Other Pacific Islander | 5 | 0.0 | 80.0 | 0.0 | 20.0 | 0.0 | 0.0 | 5 | 0.0 | 80.0 | 20.0 | 0.0 | 0.0 | 0.0 |
|  | Two or More Races | 103 | 17.5 | 40.8 | 2.9 | 11.7 | 6.8 | 20.4 | 103 | 17.5 | 43.7 | 6.8 | 13.6 | 5.8 | 12.6 |
|  | White | 109 | 9.2 | 29.4 | 7.3 | 15.6 | 9.2 | 29.4 | 109 | 9.2 | 39.4 | 9.2 | 14.7 | 8.3 | 19.3 |
|  | Other/Unknown | 6 | 33.3 | 33.3 | 0.0 | 16.7 | 0.0 | 16.7 | 6 | 33.3 | 16.7 | 16.7 | 16.7 | 16.7 | 0.0 |
| Other | Gifted | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | IEP | 10 | 30.0 | 10.0 | 0.0 | 50.0 | 0.0 | 10.0 | 10 | 30.0 | 40.0 | 10.0 | 10.0 | 0.0 | 10.0 |
|  | Migrant | 3 | 0.0 | 33.3 | 0.0 | 33.3 | 33.3 | 0.0 | 3 | 0.0 | 33.3 | 33.3 | 0.0 | 33.3 | 0.0 |
| Primary Disability | Autism | 2 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 2 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 |
|  | Intellectual Disability | 2 | 50.0 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Other health impairment | 3 | 33.3 | 0.0 | 0.0 | 66.7 | 0.0 | 0.0 | 3 | 33.3 | 33.3 | 0.0 | 33.3 | 0.0 | 0.0 |
|  | Specific learning disability | 3 | 0.0 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Visual impairment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.8: Screener Performance Level by Domain - Grade 7 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 829 | 18.8 | 34.9 | 8.9 | 9.4 | 3.9 | 24.1 | 829 | 18.8 | 37.8 | 8.9 | 11.3 | 5.3 | 17.9 |
| Gender | Female | 392 | 19.1 | 32.4 | 8.7 | 9.7 | 3.1 | 27.0 | 392 | 19.1 | 35.5 | 9.4 | 10.7 | 5.4 | 19.9 |
|  | Male | 393 | 19.1 | 37.2 | 9.4 | 8.9 | 4.6 | 20.9 | 393 | 19.1 | 40.2 | 8.4 | 12.0 | 4.8 | 15.5 |
|  | Missing | 44 | 13.6 | 36.4 | 6.8 | 11.4 | 4.5 | 27.3 | 44 | 13.6 | 36.4 | 9.1 | 11.4 | 9.1 | 20.5 |
| Ethnicity | American Indian or Alaskan Native | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 123 | 1.6 | 19.5 | 13.8 | 16.3 | 4.1 | 44.7 | 123 | 1.6 | 24.4 | 15.4 | 14.6 | 7.3 | 36.6 |
|  | Black or African American | 155 | 11.6 | 26.5 | 12.3 | 17.4 | 5.2 | 27.1 | 155 | 11.6 | 34.8 | 12.3 | 12.9 | 7.1 | 21.3 |
|  | Hispanic or Latino | 327 | 32.1 | 41.6 | 5.5 | 4.6 | 3.1 | 13.1 | 327 | 32.1 | 42.2 | 5.8 | 7.6 | 3.1 | 9.2 |
|  | Native Hawaiian or Other Pacific Islander | 5 | 0.0 | 80.0 | 20.0 | 0.0 | 0.0 | 0.0 | 5 | 0.0 | 80.0 | 0.0 | 20.0 | 0.0 | 0.0 |
|  | Two or More Races | 103 | 17.5 | 41.7 | 8.7 | 5.8 | 3.9 | 22.3 | 103 | 17.5 | 44.7 | 4.9 | 12.6 | 5.8 | 14.6 |
|  | White | 109 | 9.2 | 35.8 | 8.3 | 9.2 | 3.7 | 33.9 | 109 | 9.2 | 36.7 | 9.2 | 15.6 | 6.4 | 22.9 |
|  | Other/Unknown | 6 | 33.3 | 33.3 | 16.7 | 0.0 | 16.7 | 0.0 | 6 | 33.3 | 16.7 | 33.3 | 0.0 | 16.7 | 0.0 |
| Other | Gifted | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | IEP | 10 | 30.0 | 20.0 | 20.0 | 20.0 | 0.0 | 10.0 | 10 | 30.0 | 40.0 | 20.0 | 0.0 | 0.0 | 10.0 |
|  | Migrant | 3 | 0.0 | 33.3 | 0.0 | 0.0 | 33.3 | 33.3 | 3 | 0.0 | 33.3 | 0.0 | 33.3 | 33.3 | 0.0 |
| Primary Disability | Autism | 2 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 2 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 |
|  | Intellectual Disability | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | Other health impairment | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 0.0 | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 3 | 0.0 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 |


| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
|  | Visual impairment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.9: Screener Performance Level by Domain-Grade 8

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 682 | 15.4 | 32.0 | 9.7 | 15.0 | 8.5 | 19.5 | 682 | 15.4 | 42.2 | 8.9 | 19.8 | 5.1 | 8.5 |
| Gender | Female | 292 | 13.0 | 30.1 | 9.2 | 16.8 | 9.6 | 21.2 | 292 | 13.0 | 40.1 | 11.6 | 21.2 | 5.1 | 8.9 |
|  | Male | 346 | 17.6 | 33.5 | 10.7 | 13.6 | 6.6 | 17.9 | 346 | 17.6 | 44.8 | 6.9 | 17.3 | 5.2 | 8.1 |
|  | Missing | 44 | 13.6 | 31.8 | 4.5 | 13.6 | 15.9 | 20.5 | 44 | 13.6 | 36.4 | 6.8 | 29.5 | 4.5 | 9.1 |
| Ethnicity | American Indian or Alaskan Native | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 106 | 3.8 | 19.8 | 15.1 | 18.9 | 13.2 | 29.2 | 106 | 3.8 | 36.8 | 8.5 | 24.5 | 6.6 | 19.8 |
|  | Black or African American | 127 | 13.4 | 21.3 | 10.2 | 20.5 | 15.0 | 19.7 | 127 | 13.4 | 32.3 | 12.6 | 29.9 | 6.3 | 5.5 |
|  | Hispanic or Latino | 232 | 18.1 | 41.4 | 7.8 | 11.2 | 6.0 | 15.5 | 232 | 18.1 | 48.3 | 8.6 | 15.1 | 4.7 | 5.2 |
|  | Native Hawaiian or Other Pacific Islander | 3 | 0.0 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 33.3 | 0.0 | 0.0 | 0.0 |
|  | Two or More Races | 108 | 30.6 | 38.0 | 1.9 | 9.3 | 4.6 | 15.7 | 108 | 30.6 | 39.8 | 4.6 | 16.7 | 2.8 | 5.6 |
|  | White | 98 | 7.1 | 28.6 | 15.3 | 18.4 | 6.1 | 24.5 | 98 | 7.1 | 46.9 | 9.2 | 18.4 | 6.1 | 12.2 |
|  | Other/Unknown | 7 | 28.6 | 42.9 | 14.3 | 14.3 | 0.0 | 0.0 | 7 | 28.6 | 57.1 | 14.3 | 0.0 | 0.0 | 0.0 |
| Other | Gifted | 2 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 | 2 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | IEP | 8 | 12.5 | 12.5 | 25.0 | 25.0 | 0.0 | 25.0 | 8 | 12.5 | 25.0 | 25.0 | 12.5 | 0.0 | 25.0 |
|  | Migrant | 3 | 0.0 | 66.7 | 0.0 | 0.0 | 0.0 | 33.3 | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Autism | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 4 | 0.0 | 25.0 | 50.0 | 0.0 | 0.0 | 25.0 | 4 | 0.0 | 50.0 | 25.0 | 0.0 | 0.0 | 25.0 |
|  | Specific learning disability | 3 | 0.0 | 0.0 | 0.0 | 66.7 | 0.0 | 33.3 | 3 | 0.0 | 0.0 | 33.3 | 33.3 | 0.0 | 33.3 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.9: Screener Performance Level by Domain - Grade 8 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 682 | 15.4 | 35.5 | 9.8 | 12.5 | 5.7 | 21.1 | 682 | 15.4 | 39.7 | 11.6 | 14.8 | 4.7 | 13.8 |
| Gender | Female | 292 | 13.0 | 32.5 | 11.6 | 14.4 | 6.8 | 21.6 | 292 | 13.0 | 38.4 | 12.7 | 16.4 | 3.8 | 15.8 |
|  | Male | 346 | 17.6 | 38.7 | 8.4 | 11.0 | 4.3 | 19.9 | 346 | 17.6 | 41.3 | 10.4 | 13.3 | 5.2 | 12.1 |
|  | Missing | 44 | 13.6 | 29.5 | 9.1 | 11.4 | 9.1 | 27.3 | 44 | 13.6 | 36.4 | 13.6 | 15.9 | 6.8 | 13.6 |
| Ethnicity | American Indian or Alaskan Native | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 106 | 3.8 | 21.7 | 15.1 | 17.0 | 4.7 | 37.7 | 106 | 3.8 | 30.2 | 15.1 | 22.6 | 2.8 | 25.5 |
|  | Black or African American | 127 | 13.4 | 23.6 | 11.0 | 21.3 | 7.9 | 22.8 | 127 | 13.4 | 27.6 | 15.7 | 25.2 | 6.3 | 11.8 |
|  | Hispanic or Latino | 232 | 18.1 | 44.4 | 10.8 | 6.5 | 5.6 | 14.7 | 232 | 18.1 | 48.7 | 8.2 | 10.8 | 3.9 | 10.3 |
|  | Native Hawaiian or Other Pacific Islander | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
|  | Two or More Races | 108 | 30.6 | 38.9 | 2.8 | 4.6 | 5.6 | 17.6 | 108 | 30.6 | 39.8 | 5.6 | 8.3 | 5.6 | 10.2 |
|  | White | 98 | 7.1 | 38.8 | 8.2 | 18.4 | 5.1 | 22.4 | 98 | 7.1 | 41.8 | 17.3 | 10.2 | 6.1 | 17.3 |
|  | Other/Unknown | 7 | 28.6 | 42.9 | 14.3 | 14.3 | 0.0 | 0.0 | 7 | 28.6 | 57.1 | 14.3 | 0.0 | 0.0 | 0.0 |
| Other | Gifted | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 | 2 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | IEP | 8 | 12.5 | 37.5 | 12.5 | 12.5 | 0.0 | 25.0 | 8 | 12.5 | 25.0 | 25.0 | 12.5 | 0.0 | 25.0 |
|  | Migrant | 3 | 0.0 | 66.7 | 0.0 | 0.0 | 0.0 | 33.3 | 3 | 0.0 | 66.7 | 0.0 | 0.0 | 33.3 | 0.0 |
| Primary Disability | Autism | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 4 | 0.0 | 75.0 | 0.0 | 0.0 | 0.0 | 25.0 | 4 | 0.0 | 50.0 | 25.0 | 0.0 | 0.0 | 25.0 |
|  | Specific learning disability | 3 | 0.0 | 0.0 | 33.3 | 33.3 | 0.0 | 33.3 | 3 | 0.0 | 0.0 | 33.3 | 33.3 | 0.0 | 33.3 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.10: Screener Performance Level by Domain - Grade 9

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 1,273 | 18.1 | 39.3 | 8.7 | 14.3 | 5.9 | 13.7 | 1,273 | 18.1 | 45.9 | 10.8 | 14.2 | 4.1 | 6.8 |
| Gender | Female | 520 | 18.1 | 37.9 | 9.4 | 14.4 | 6.3 | 13.8 | 520 | 18.1 | 44.4 | 11.3 | 15.8 | 2.9 | 7.5 |
|  | Male | 670 | 17.9 | 40.9 | 8.5 | 14.5 | 5.2 | 13.0 | 670 | 17.9 | 47.6 | 10.6 | 13.1 | 4.9 | 5.8 |
|  | Missing | 83 | 20.5 | 34.9 | 6.0 | 12.0 | 8.4 | 18.1 | 83 | 20.5 | 41.0 | 9.6 | 13.3 | 4.8 | 10.8 |
| Ethnicity | American Indian or Alaskan Native | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Asian | 150 | 1.3 | 22.0 | 13.3 | 22.0 | 12.0 | 29.3 | 150 | 1.3 | 29.3 | 20.0 | 23.3 | 9.3 | 16.7 |
|  | Black or African American | 255 | 12.9 | 32.9 | 11.8 | 22.0 | 7.5 | 12.9 | 255 | 12.9 | 42.0 | 16.9 | 19.6 | 2.4 | 6.3 |
|  | Hispanic or Latino | 518 | 22.4 | 51.5 | 6.2 | 8.3 | 3.3 | 8.3 | 518 | 22.4 | 57.3 | 4.8 | 9.1 | 2.5 | 3.9 |
|  | Native Hawaiian or Other Pacific Islander | 11 | 9.1 | 63.6 | 9.1 | 9.1 | 9.1 | 0.0 | 11 | 9.1 | 72.7 | 9.1 | 9.1 | 0.0 | 0.0 |
|  | Two or More Races | 192 | 30.7 | 39.6 | 8.9 | 8.9 | 3.6 | 8.3 | 192 | 30.7 | 44.3 | 10.4 | 7.3 | 2.1 | 5.2 |
|  | White | 120 | 12.5 | 24.2 | 9.2 | 21.7 | 7.5 | 25.0 | 120 | 12.5 | 31.7 | 13.3 | 21.7 | 10.0 | 10.8 |
|  | Other/Unknown | 26 | 19.2 | 15.4 | 0.0 | 23.1 | 11.5 | 30.8 | 26 | 19.2 | 19.2 | 11.5 | 26.9 | 11.5 | 11.5 |
| Other | Gifted | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | IEP | 8 | 0.0 | 37.5 | 25.0 | 25.0 | 0.0 | 12.5 | 8 | 0.0 | 62.5 | 25.0 | 0.0 | 0.0 | 12.5 |
|  | Migrant | 4 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4 | 0.0 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Intellectual Disability | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 6 | 0.0 | 33.3 | 16.7 | 50.0 | 0.0 | 0.0 | 6 | 0.0 | 50.0 | 33.3 | 16.7 | 0.0 | 0.0 |
|  | Speech or language impairment | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |

[^16]Table S2.10: Screener Performance Level by Domain - Grade 9 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 1,273 | 18.1 | 41.2 | 10.0 | 10.8 | 2.7 | 17.1 | 1,273 | 18.1 | 46.7 | 9.3 | 12.0 | 3.7 | 10.1 |
| Gender | Female | 520 | 18.1 | 38.8 | 12.5 | 10.4 | 2.5 | 17.7 | 520 | 18.1 | 45.2 | 11.2 | 11.9 | 3.1 | 10.6 |
|  | Male | 670 | 17.9 | 43.6 | 8.4 | 11.6 | 2.4 | 16.1 | 670 | 17.9 | 48.7 | 7.9 | 12.2 | 3.9 | 9.4 |
|  | Missing | 83 | 20.5 | 37.3 | 7.2 | 7.2 | 6.0 | 21.7 | 83 | 20.5 | 39.8 | 9.6 | 10.8 | 6.0 | 13.3 |
| Ethnicity | American Indian or Alaskan Native | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 150 | 1.3 | 24.0 | 14.7 | 19.3 | 5.3 | 35.3 | 150 | 1.3 | 30.0 | 17.3 | 23.3 | 6.7 | 21.3 |
|  | Black or African American | 255 | 12.9 | 32.2 | 15.7 | 19.6 | 0.8 | 18.8 | 255 | 12.9 | 43.1 | 13.7 | 15.3 | 5.5 | 9.4 |
|  | Hispanic or Latino | 518 | 22.4 | 55.2 | 4.8 | 6.2 | 2.3 | 9.1 | 518 | 22.4 | 57.5 | 5.0 | 7.1 | 2.3 | 5.6 |
|  | Native Hawaiian or Other Pacific Islander | 11 | 9.1 | 63.6 | 0.0 | 18.2 | 9.1 | 0.0 | 11 | 9.1 | 72.7 | 0.0 | 18.2 | 0.0 | 0.0 |
|  | Two or More Races | 192 | 30.7 | 41.7 | 8.3 | 5.7 | 2.1 | 11.5 | 192 | 30.7 | 45.8 | 5.7 | 8.9 | 1.0 | 7.8 |
|  | White | 120 | 12.5 | 24.2 | 17.5 | 10.0 | 5.8 | 30.0 | 120 | 12.5 | 34.2 | 13.3 | 14.2 | 6.7 | 19.2 |
|  | Other/Unknown | 26 | 19.2 | 19.2 | 11.5 | 7.7 | 0.0 | 42.3 | 26 | 19.2 | 15.4 | 15.4 | 23.1 | 3.8 | 23.1 |
| Other | Gifted | 0 |  |  |  |  |  |  | 0 |  |  |  |  |  |  |
|  | IEP | 8 | 0.0 | 25.0 | 0.0 | 62.5 | 0.0 | 12.5 | 8 | 0.0 | 62.5 | 12.5 | 12.5 | 0.0 | 12.5 |
|  | Migrant | 4 | 0.0 | 75.0 | 25.0 | 0.0 | 0.0 | 0.0 | 4 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Intellectual Disability | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 6 | 0.0 | 16.7 | 0.0 | 50.0 | 0.0 | 33.3 | 6 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 |
|  | Speech or language impairment | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |

[^17]Table S2.11: Screener Performance Level by Domain - Grade 10

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 676 | 9.6 | 29.7 | 11.7 | 19.1 | 10.8 | 19.1 | 676 | 9.6 | 38.0 | 15.2 | 21.0 | 6.4 | 9.8 |
| Gender | Female | 298 | 10.1 | 27.5 | 13.1 | 18.5 | 10.4 | 20.5 | 298 | 10.1 | 37.2 | 14.4 | 22.5 | 7.0 | 8.7 |
|  | Male | 327 | 10.1 | 30.0 | 10.4 | 20.5 | 11.0 | 18.0 | 327 | 10.1 | 36.4 | 17.1 | 20.5 | 5.5 | 10.4 |
|  | Missing | 51 | 3.9 | 41.2 | 11.8 | 13.7 | 11.8 | 17.6 | 51 | 3.9 | 52.9 | 7.8 | 15.7 | 7.8 | 11.8 |
| Ethnicity | American Indian or Alaskan Native | 2 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 108 | 3.7 | 13.9 | 18.5 | 24.1 | 10.2 | 29.6 | 108 | 3.7 | 26.9 | 20.4 | 21.3 | 7.4 | 20.4 |
|  | Black or African American | 148 | 3.4 | 18.2 | 14.9 | 22.3 | 17.6 | 23.6 | 148 | 3.4 | 28.4 | 20.9 | 27.0 | 12.8 | 7.4 |
|  | Hispanic or Latino | 212 | 17.5 | 44.3 | 7.1 | 15.6 | 5.2 | 10.4 | 212 | 17.5 | 50.0 | 10.8 | 13.2 | 2.8 | 5.7 |
|  | Native Hawaiian or Other Pacific Islander | 3 | 0.0 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 | 3 | 0.0 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 |
|  | Two or More Races | 103 | 14.6 | 37.9 | 6.8 | 16.5 | 10.7 | 13.6 | 103 | 14.6 | 42.7 | 10.7 | 23.3 | 2.9 | 5.8 |
|  | White | 86 | 1.2 | 24.4 | 16.3 | 20.9 | 15.1 | 22.1 | 86 | 1.2 | 36.0 | 16.3 | 27.9 | 5.8 | 12.8 |
|  | Other/Unknown | 14 | 21.4 | 14.3 | 7.1 | 0.0 | 7.1 | 50.0 | 14 | 21.4 | 14.3 | 7.1 | 14.3 | 14.3 | 28.6 |
| Other | IEP | 4 | 25.0 | 25.0 | 0.0 | 50.0 | 0.0 | 0.0 | 4 | 25.0 | 25.0 | 25.0 | 25.0 | 0.0 | 0.0 |
| Primary Disability | Developmental delay | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 2 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 | 0.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.11: Screener Performance Level by Domain - Grade 10 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 676 | 9.6 | 32.5 | 16.1 | 13.2 | 4.3 | 24.3 | 676 | 9.6 | 37.0 | 15.5 | 16.6 | 6.8 | 14.5 |
| Gender | Female | 298 | 10.1 | 29.2 | 17.8 | 13.1 | 4.4 | 25.5 | 298 | 10.1 | 36.2 | 13.8 | 17.8 | 7.0 | 15.1 |
|  | Male | 327 | 10.1 | 33.9 | 15.3 | 13.1 | 4.9 | 22.6 | 327 | 10.1 | 35.8 | 18.3 | 15.0 | 7.0 | 13.8 |
|  | Missing | 51 | 3.9 | 43.1 | 11.8 | 13.7 | 0.0 | 27.5 | 51 | 3.9 | 49.0 | 7.8 | 19.6 | 3.9 | 15.7 |
| Ethnicity | American Indian or Alaskan Native | 2 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 108 | 3.7 | 21.3 | 15.7 | 19.4 | 0.9 | 38.9 | 108 | 3.7 | 25.9 | 21.3 | 18.5 | 7.4 | 23.1 |
|  | Black or African American | 148 | 3.4 | 18.2 | 23.0 | 17.6 | 6.1 | 31.8 | 148 | 3.4 | 24.3 | 23.0 | 19.6 | 14.2 | 15.5 |
|  | Hispanic or Latino | 212 | 17.5 | 50.9 | 9.9 | 5.7 | 2.8 | 13.2 | 212 | 17.5 | 50.0 | 9.9 | 12.3 | 1.9 | 8.5 |
|  | Native Hawaiian or Other Pacific Islander | 3 | 0.0 | 33.3 | 0.0 | 0.0 | 33.3 | 33.3 | 3 | 0.0 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 |
|  | Two or More Races | 103 | 14.6 | 34.0 | 16.5 | 15.5 | 2.9 | 16.5 | 103 | 14.6 | 43.7 | 9.7 | 16.5 | 5.8 | 9.7 |
|  | White | 86 | 1.2 | 25.6 | 22.1 | 15.1 | 5.8 | 30.2 | 86 | 1.2 | 34.9 | 17.4 | 20.9 | 7.0 | 18.6 |
|  | Other/Unknown | 14 | 21.4 | 14.3 | 7.1 | 7.1 | 28.6 | 21.4 | 14 | 21.4 | 14.3 | 7.1 | 7.1 | 7.1 | 42.9 |
| Other | IEP | 4 | 25.0 | 25.0 | 25.0 | 25.0 | 0.0 | 0.0 | 4 | 25.0 | 25.0 | 0.0 | 50.0 | 0.0 | 0.0 |
| Primary Disability | Developmental delay | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 2 | 0.0 | 0.0 | 0.0 | 50.0 | 50.0 | 0.0 |

Domains with Exemption are excluded.

* Level 0: Performance Not Determined.

Table S2.12: Screener Performance Level by Domain - Grade 11

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 414 | 6.3 | 23.7 | 10.1 | 20.8 | 9.2 | 30.0 | 414 | 6.3 | 30.2 | 16.9 | 23.7 | 8.0 | 15.0 |
| Gender | Female | 198 | 6.1 | 26.8 | 10.1 | 20.2 | 7.1 | 29.8 | 198 | 6.1 | 34.8 | 15.7 | 20.7 | 8.1 | 14.6 |
|  | Male | 180 | 7.2 | 20.0 | 9.4 | 21.1 | 11.7 | 30.6 | 180 | 7.2 | 26.1 | 16.7 | 27.8 | 7.8 | 14.4 |
|  | Missing | 36 | 2.8 | 25.0 | 13.9 | 22.2 | 8.3 | 27.8 | 36 | 2.8 | 25.0 | 25.0 | 19.4 | 8.3 | 19.4 |
| Ethnicity | Asian | 73 | 2.7 | 11.0 | 9.6 | 30.1 | 11.0 | 35.6 | 73 | 2.7 | 17.8 | 16.4 | 28.8 | 8.2 | 26.0 |
|  | Black or African American | 91 | 3.3 | 19.8 | 16.5 | 25.3 | 13.2 | 22.0 | 91 | 3.3 | 27.5 | 25.3 | 31.9 | 6.6 | 5.5 |
|  | Hispanic or Latino | 143 | 13.3 | 39.2 | 9.1 | 9.8 | 4.2 | 24.5 | 143 | 13.3 | 46.2 | 8.4 | 13.3 | 7.0 | 11.9 |
|  | Native Hawaiian or Other Pacific Islander | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Two or More Races | 24 | 8.3 | 29.2 | 0.0 | 25.0 | 8.3 | 29.2 | 24 | 8.3 | 29.2 | 16.7 | 25.0 | 0.0 | 20.8 |
|  | White | 72 | 0.0 | 12.5 | 8.3 | 22.2 | 11.1 | 45.8 | 72 | 0.0 | 18.1 | 20.8 | 27.8 | 12.5 | 20.8 |
|  | Other/Unknown | 10 | 0.0 | 0.0 | 10.0 | 40.0 | 20.0 | 30.0 | 10 | 0.0 | 10.0 | 30.0 | 30.0 | 20.0 | 10.0 |
| Other | IEP | 3 | 33.3 | 0.0 | 33.3 | 33.3 | 0.0 | 0.0 | 3 | 33.3 | 0.0 | 66.7 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Intellectual Disability | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.12: Screener Performance Level by Domain - Grade 11 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 414 | 6.3 | 25.4 | 15.2 | 14.5 | 4.8 | 33.8 | 414 | 6.3 | 30.4 | 14.5 | 20.3 | 7.0 | 21.5 |
| Gender | Female | 198 | 6.1 | 29.3 | 11.6 | 16.7 | 4.5 | 31.8 | 198 | 6.1 | 34.8 | 13.1 | 17.2 | 5.6 | 23.2 |
|  | Male | 180 | 7.2 | 22.8 | 16.1 | 12.2 | 5.0 | 36.7 | 180 | 7.2 | 26.1 | 15.0 | 23.9 | 8.9 | 18.9 |
|  | Missing | 36 | 2.8 | 16.7 | 30.6 | 13.9 | 5.6 | 30.6 | 36 | 2.8 | 27.8 | 19.4 | 19.4 | 5.6 | 25.0 |
| Ethnicity | Asian | 73 | 2.7 | 13.7 | 17.8 | 20.5 | 2.7 | 42.5 | 73 | 2.7 | 17.8 | 17.8 | 26.0 | 4.1 | 31.5 |
|  | Black or African American | 91 | 3.3 | 17.6 | 20.9 | 24.2 | 3.3 | 30.8 | 91 | 3.3 | 27.5 | 22.0 | 24.2 | 11.0 | 12.1 |
|  | Hispanic or Latino | 143 | 13.3 | 41.3 | 10.5 | 6.3 | 4.2 | 24.5 | 143 | 13.3 | 46.9 | 7.0 | 9.1 | 7.0 | 16.8 |
|  | Native Hawaiian or Other Pacific Islander | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Two or More Races | 24 | 8.3 | 33.3 | 4.2 | 12.5 | 4.2 | 37.5 | 24 | 8.3 | 29.2 | 8.3 | 29.2 | 4.2 | 20.8 |
|  | White | 72 | 0.0 | 15.3 | 16.7 | 13.9 | 11.1 | 43.1 | 72 | 0.0 | 18.1 | 16.7 | 25.0 | 5.6 | 34.7 |
|  | Other/Unknown | 10 | 0.0 | 10.0 | 20.0 | 10.0 | 0.0 | 60.0 | 10 | 0.0 | 10.0 | 20.0 | 50.0 | 10.0 | 10.0 |
| Other | IEP | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 0.0 | 3 | 33.3 | 33.3 | 33.3 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Intellectual Disability | 2 | 50.0 | 0.0 | 50.0 | 0.0 | 0.0 | 0.0 | 2 | 50.0 | 50.0 | 0.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 |

* Domains with Exemption are excluded.
* Level 0: Performance Not Determined.

Table S2.13: Screener Performance Level by Domain - Grade 12

| Subgroup | Status | Listening |  |  |  |  |  |  | Reading |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 249 | 7.6 | 16.1 | 8.8 | 25.3 | 10.0 | 32.1 | 249 | 7.6 | 21.7 | 15.7 | 30.9 | 8.8 | 15.3 |
| Gender | Female | 117 | 4.3 | 10.3 | 12.8 | 31.6 | 9.4 | 31.6 | 117 | 4.3 | 17.1 | 20.5 | 32.5 | 10.3 | 15.4 |
|  | Male | 116 | 12.1 | 20.7 | 4.3 | 19.0 | 11.2 | 32.8 | 116 | 12.1 | 24.1 | 10.3 | 29.3 | 6.9 | 17.2 |
|  | Missing | 16 | 0.0 | 25.0 | 12.5 | 25.0 | 6.3 | 31.3 | 16 | 0.0 | 37.5 | 18.8 | 31.3 | 12.5 | 0.0 |
| Ethnicity | Asian | 45 | 0.0 | 4.4 | 8.9 | 24.4 | 15.6 | 46.7 | 45 | 0.0 | 11.1 | 11.1 | 37.8 | 17.8 | 22.2 |
|  | Black or African American | 50 | 2.0 | 16.0 | 16.0 | 34.0 | 8.0 | 24.0 | 50 | 2.0 | 24.0 | 22.0 | 30.0 | 8.0 | 14.0 |
|  | Hispanic or Latino | 79 | 19.0 | 32.9 | 6.3 | 17.7 | 6.3 | 17.7 | 79 | 19.0 | 36.7 | 15.2 | 16.5 | 3.8 | 8.9 |
|  | Native Hawaiian or Other Pacific Islander | 2 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 2 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 0.0 |
|  | Two or More Races | 13 | 7.7 | 0.0 | 0.0 | 23.1 | 7.7 | 61.5 | 13 | 7.7 | 0.0 | 0.0 | 46.2 | 7.7 | 38.5 |
|  | White | 47 | 2.1 | 8.5 | 6.4 | 27.7 | 14.9 | 40.4 | 47 | 2.1 | 17.0 | 12.8 | 46.8 | 4.3 | 17.0 |
|  | Other/Unknown | 13 | 7.7 | 0.0 | 15.4 | 30.8 | 7.7 | 38.5 | 13 | 7.7 | 0.0 | 30.8 | 30.8 | 23.1 | 7.7 |
| Other | IEP | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Other health impairment | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |

[^18]Table S2.13: Screener Performance Level by Domain - Grade 12 (cont.)

| Subgroup | Status | Speaking |  |  |  |  |  |  | Writing |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | 0 | 1 | 2 | 3 | 4 | 5 | N | 0 | 1 | 2 | 3 | 4 | 5 |
| Total |  | 249 | 7.6 | 18.5 | 15.3 | 16.5 | 6.8 | 35.3 | 249 | 7.6 | 22.9 | 16.9 | 20.5 | 10.0 | 22.1 |
| Gender | Female | 117 | 4.3 | 13.7 | 21.4 | 18.8 | 6.8 | 35.0 | 117 | 4.3 | 20.5 | 20.5 | 24.8 | 9.4 | 20.5 |
|  | Male | 116 | 12.1 | 22.4 | 9.5 | 13.8 | 5.2 | 37.1 | 116 | 12.1 | 23.3 | 13.8 | 17.2 | 9.5 | 24.1 |
|  | Missing | 16 | 0.0 | 25.0 | 12.5 | 18.8 | 18.8 | 25.0 | 16 | 0.0 | 37.5 | 12.5 | 12.5 | 18.8 | 18.8 |
| Ethnicity | Asian | 45 | 0.0 | 4.4 | 13.3 | 20.0 | 8.9 | 53.3 | 45 | 0.0 | 8.9 | 15.6 | 33.3 | 11.1 | 31.1 |
|  | Black or African American | 50 | 2.0 | 22.0 | 20.0 | 20.0 | 8.0 | 28.0 | 50 | 2.0 | 28.0 | 18.0 | 26.0 | 10.0 | 16.0 |
|  | Hispanic or Latino | 79 | 19.0 | 32.9 | 10.1 | 13.9 | 6.3 | 17.7 | 79 | 19.0 | 39.2 | 15.2 | 7.6 | 6.3 | 12.7 |
|  | Native Hawaiian or Other Pacific Islander | 2 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | 50.0 | 2 | 0.0 | 0.0 | 50.0 | 0.0 | 0.0 | 50.0 |
|  | Two or More Races | 13 | 7.7 | 0.0 | 15.4 | 0.0 | 0.0 | 76.9 | 13 | 7.7 | 0.0 | 7.7 | 15.4 | 15.4 | 53.8 |
|  | White | 47 | 2.1 | 12.8 | 21.3 | 17.0 | 4.3 | 42.6 | 47 | 2.1 | 17.0 | 17.0 | 27.7 | 12.8 | 23.4 |
|  | Other/Unknown | 13 | 7.7 | 7.7 | 15.4 | 15.4 | 15.4 | 38.5 | 13 | 7.7 | 0.0 | 30.8 | 15.4 | 15.4 | 30.8 |
| Other | IEP | 3 | 0.0 | 33.3 | 0.0 | 33.3 | 33.3 | 0.0 | 3 | 0.0 | 66.7 | 0.0 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Other health impairment | 1 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 | 0.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 |

[^19]
## Section 3: Screener Assessment - Percentage of Students by Overall Proficiency Level

Table S3.1: Screener Overall Proficiency Levels - Kindergarten

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 9,965 | 28.6 | 64.8 | 2.5 | 4.0 |
| Gender | Female | 4,493 | 27.0 | 66.8 | 2.6 | 3.6 |
|  | Male | 4,682 | 30.2 | 62.6 | 2.6 | 4.7 |
|  | Missing | 790 | 28.4 | 66.7 | 1.9 | 3.0 |
| Ethnicity | American Indian or Alaskan Native | 24 | 45.8 | 54.2 | 0.0 | 0.0 |
|  | Asian | 2,492 | 23.6 | 67.9 | 6.0 | 2.5 |
|  | Black or African American | 1,797 | 23.9 | 70.4 | 1.9 | 3.8 |
|  | Hispanic or Latino | 2,670 | 36.9 | 57.8 | 0.4 | 4.8 |
|  | Native Hawaiian or Other Pacific Islander | 46 | 13.0 | 82.6 | 0.0 | 4.3 |
|  | Two or More Races | 1,034 | 31.5 | 58.6 | 1.5 | 8.4 |
|  | White | 1,671 | 27.3 | 67.3 | 2.3 | 3.1 |
|  | Other/Unknown | 231 | 20.8 | 76.2 | 1.3 | 1.7 |
| Other | Gifted | 23 | 21.7 | 56.5 | 21.7 | 0.0 |
|  | IEP | 131 | 47.3 | 44.3 | 0.0 | 8.4 |
|  | Migrant | 9 | 33.3 | 66.7 | 0.0 | 0.0 |
| Primary Disability | Autism | 38 | 57.9 | 26.3 | 0.0 | 15.8 |
|  | Developmental delay | 5 | 40.0 | 60.0 | 0.0 | 0.0 |
|  | Emotional disturbance | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 3 | 66.7 | 33.3 | 0.0 | 0.0 |
|  | Intellectual Disability | 5 | 80.0 | 20.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 9 | 55.6 | 11.1 | 0.0 | 33.3 |
|  | Orthopedic impairment | 2 | 0.0 | 50.0 | 0.0 | 50.0 |


| Subgroup | Status | N | Emerging | Progressing | ProficientProficiency Not <br> Demonstrated |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Other health impairment | 7 | 28.6 | 57.1 | 0.0 | 14.3 |
|  | Specific learning disability | 7 | 85.7 | 14.3 | 0.0 | 0.0 |
|  | Speech or language impairment | 65 | 35.4 | 61.5 | 0.0 | 3.1 |

Table S3.2: Screener Overall Proficiency Levels - Grade 1

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 1,610 | 29.4 | 54.3 | 10.9 | 5.3 |
| Gender | Female | 715 | 27.6 | 53.8 | 11.6 | 7.0 |
|  | Male | 756 | 31.6 | 54.0 | 9.9 | 4.5 |
|  | Missing | 139 | 27.3 | 58.3 | 12.9 | 1.4 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Asian | 454 | 18.5 | 57.9 | 22.7 | 0.9 |
|  | Black or African American | 275 | 21.5 | 64.4 | 9.8 | 4.4 |
|  | Hispanic or Latino | 428 | 42.5 | 44.4 | 3.7 | 9.3 |
|  | Native Hawaiian or Other Pacific Islander | 10 | 30.0 | 60.0 | 10.0 | 0.0 |
|  | Two or More Races | 165 | 39.4 | 43.6 | 4.2 | 12.7 |
|  | White | 257 | 28.0 | 60.3 | 8.2 | 3.5 |
|  | Other/Unknown | 18 | 50.0 | 44.4 | 5.6 | 0.0 |
| Other | Gifted | 9 | 0.0 | 66.7 | 33.3 | 0.0 |
|  | IEP | 12 | 41.7 | 58.3 | 0.0 | 0.0 |
|  | Migrant | 7 | 42.9 | 57.1 | 0.0 | 0.0 |
| Primary Disability | Autism | 4 | 25.0 | 50.0 | 0.0 | 25.0 |
|  | Emotional disturbance | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Orthopedic impairment | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Speech or language impairment | 5 | 0.0 | 100.0 | 0.0 | 0.0 |

Table S3.3: Screener Overall Proficiency Levels - Grade 2

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 1,235 | 32.3 | 47.3 | 14.3 | 6.1 |
| Gender | Female | 515 | 29.7 | 47.8 | 15.9 | 6.6 |
|  | Male | 635 | 34.6 | 46.1 | 12.9 | 6.3 |
|  | Missing | 85 | 30.6 | 52.9 | 15.3 | 1.2 |
| Ethnicity | American Indian or Alaskan Native | 3 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Asian | 284 | 27.1 | 47.9 | 23.6 | 1.4 |
|  | Black or African American | 230 | 22.2 | 57.4 | 17.4 | 3.0 |
|  | Hispanic or Latino | 353 | 41.4 | 41.6 | 5.4 | 11.6 |
|  | Native Hawaiian or Other Pacific Islander | 8 | 37.5 | 50.0 | 12.5 | 0.0 |
|  | Two or More Races | 144 | 37.5 | 41.7 | 7.6 | 13.2 |
|  | White | 195 | 30.8 | 49.7 | 17.4 | 2.1 |
|  | Other/Unknown | 18 | 44.4 | 27.8 | 27.8 | 0.0 |
| Other | Gifted | 19 | 5.3 | 63.2 | 31.6 | 0.0 |
|  | IEP | 9 | 33.3 | 55.6 | 0.0 | 11.1 |
|  | Migrant | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
| Primary Disability | Autism | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 2 | 50.0 | 0.0 | 0.0 | 50.0 |
|  | Speech or language impairment | 4 | 25.0 | 75.0 | 0.0 | 0.0 |

Table S3.4: Screener Overall Proficiency Levels - Grade 3

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 1,076 | 34.3 | 43.9 | 15.0 | 6.9 |
| Gender | Female | 478 | 30.8 | 44.4 | 16.9 | 7.9 |
|  | Male | 528 | 36.0 | 44.3 | 13.1 | 6.6 |
|  | Missing | 70 | 45.7 | 37.1 | 15.7 | 1.4 |
| Ethnicity | American Indian or Alaskan Native | 2 | 0.0 | 50.0 | 50.0 | 0.0 |
|  | Asian | 228 | 21.9 | 45.6 | 31.1 | 1.3 |
|  | Black or African American | 216 | 31.9 | 50.0 | 11.1 | 6.9 |
|  | Hispanic or Latino | 318 | 45.3 | 36.5 | 7.2 | 11.0 |
|  | Native Hawaiian or Other Pacific Islander | 6 | 16.7 | 83.3 | 0.0 | 0.0 |
|  | Two or More Races | 146 | 38.4 | 43.8 | 8.2 | 9.6 |
|  | White | 145 | 31.0 | 43.4 | 20.7 | 4.8 |
|  | Other/Unknown | 15 | 26.7 | 73.3 | 0.0 | 0.0 |
| Other | Gifted | 3 | 0.0 | 33.3 | 66.7 | 0.0 |
|  | IEP | 8 | 25.0 | 62.5 | 0.0 | 12.5 |
|  | Migrant | 3 | 66.7 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Autism | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 3 | 33.3 | 66.7 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 50.0 | 0.0 | 0.0 | 50.0 |
|  | Speech or language impairment | 2 | 0.0 | 100.0 | 0.0 | 0.0 |

Table S3.5: Screener Overall Proficiency Levels - Grade 4

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 911 | 32.9 | 30.4 | 27.8 | 8.9 |
| Gender | Female | 415 | 29.4 | 31.3 | 30.6 | 8.7 |
|  | Male | 432 | 36.8 | 29.6 | 24.3 | 9.3 |
|  | Missing | 64 | 29.7 | 29.7 | 32.8 | 7.8 |
| Ethnicity | American Indian or Alaskan Native | 5 | 20.0 | 40.0 | 20.0 | 20.0 |
|  | Asian | 186 | 16.7 | 36.0 | 45.2 | 2.2 |
|  | Black or African American | 170 | 24.1 | 38.8 | 30.6 | 6.5 |
|  | Hispanic or Latino | 281 | 44.8 | 26.0 | 15.3 | 13.9 |
|  | Native Hawaiian or Other Pacific Islander | 5 | 40.0 | 20.0 | 40.0 | 0.0 |
|  | Two or More Races | 119 | 40.3 | 27.7 | 19.3 | 12.6 |
|  | White | 132 | 35.6 | 22.0 | 34.1 | 8.3 |
|  | Other/Unknown | 13 | 30.8 | 46.2 | 23.1 | 0.0 |
| Other | Gifted | 6 | 16.7 | 16.7 | 66.7 | 0.0 |
|  | IEP | 11 | 18.2 | 27.3 | 27.3 | 27.3 |
|  | Migrant | 3 | 66.7 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Autism | 3 | 0.0 | 33.3 | 0.0 | 66.7 |
|  | Emotional disturbance | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Hearing Impaired | 1 | 0.0 | 0.0 | 100.0 | 0.0 |
|  | Intellectual Disability | 1 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | Multiple disabilities | 1 | 100.0 | 0.0 | 0.0 | $0.0$ |
|  | Orthopedic impairment | 1 | 0.0 | 0.0 | 100.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 |


| Subgroup | Status | $\mathbf{N}$ | Emerging | Progressing | Proficient | Proficiency Not <br> Demonstrated |
| :---: | :---: | :---: | ---: | ---: | ---: | ---: |
|  | Specific learning disability | 2 | 50.0 | 0.0 | 50.0 | 0.0 |
|  | Speech or language impairment | 2 | 0.0 | 100.0 | 0.0 | 0.0 |

Table S3.6: Screener Overall Proficiency Levels - Grade 5

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 912 | 33.4 | 33.6 | 24.5 | 8.6 |
| Gender | Female | 400 | 32.3 | 33.0 | 25.5 | 9.3 |
|  | Male | 456 | 34.0 | 34.2 | 23.5 | 8.3 |
|  | Missing | 56 | 37.5 | 32.1 | 25.0 | 5.4 |
| Ethnicity | American Indian or Alaskan Native | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 179 | 22.9 | 39.1 | 35.2 | 2.8 |
|  | Black or African American | 183 | 30.1 | 38.8 | 23.5 | 7.7 |
|  | Hispanic or Latino | 264 | 40.9 | 29.2 | 14.0 | 15.9 |
|  | Native Hawaiian or Other Pacific Islander | 8 | 37.5 | 37.5 | 12.5 | 12.5 |
|  | Two or More Races | 119 | 31.9 | 32.8 | 26.9 | 8.4 |
|  | White | 150 | 37.3 | 29.3 | 30.0 | 3.3 |
|  | Other/Unknown | 8 | 37.5 | 25.0 | 25.0 | 12.5 |
| Other | Gifted | 8 | 12.5 | 37.5 | 50.0 | 0.0 |
|  | IEP | 6 | 33.3 | 50.0 | 16.7 | 0.0 |
|  | Migrant | 1 | 0.0 | 0.0 | 100.0 | 0.0 |
| Primary Disability | Emotional disturbance | 2 | 50.0 | 0.0 | 50.0 | 0.0 |
|  | Multiple disabilities | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Other health impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 0.0 | 100.0 | 0.0 | 0.0 |

Table S3.7: Screener Overall Proficiency Levels - Grade 6

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 771 | 29.4 | 33.3 | 24.8 | 12.5 |
| Gender | Female | 342 | 26.6 | 31.9 | 28.7 | 12.9 |
|  | Male | 369 | 31.4 | 33.9 | 22.0 | 12.7 |
|  | Missing | 60 | 33.3 | 38.3 | 20.0 | 8.3 |
| Ethnicity | American Indian or Alaskan Native | 4 | 25.0 | 50.0 | 25.0 | 0.0 |
|  | Asian | 129 | 18.6 | 30.2 | 48.1 | 3.1 |
|  | Black or African American | 166 | 25.3 | 39.8 | 23.5 | 11.4 |
|  | Hispanic or Latino | 282 | 36.5 | 30.5 | 14.5 | 18.4 |
|  | Native Hawaiian or Other Pacific Islander | 2 | 50.0 | 50.0 | 0.0 | 0.0 |
|  | Two or More Races | 66 | 31.8 | 34.8 | 15.2 | 18.2 |
|  | White | 112 | 28.6 | 31.3 | 33.0 | 7.1 |
|  | Other/Unknown | 10 | 30.0 | 50.0 | 10.0 | 10.0 |
| Other | Gifted | 4 | 0.0 | 50.0 | 50.0 | 0.0 |
|  | IEP | 5 | 20.0 | 80.0 | 0.0 | 0.0 |
|  | Migrant | 4 | 25.0 | 50.0 | 25.0 | 0.0 |
| Primary Disability | Autism | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 3 | 0.0 | 100.0 | 0.0 | 0.0 |

Table S3.8: Screener Overall Proficiency Levels - Grade 7

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 829 | 36.9 | 24.5 | 19.8 | 18.8 |
| Gender | Female | 392 | 34.7 | 24.0 | 22.2 | 19.1 |
|  | Male | 393 | 39.4 | 24.9 | 16.5 | 19.1 |
|  | Missing | 44 | 34.1 | 25.0 | 27.3 | 13.6 |
| Ethnicity | American Indian or Alaskan Native | 1 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | Asian | 123 | 23.6 | 33.3 | 41.5 | 1.6 |
|  | Black or African American | 155 | 32.3 | 32.9 | 23.2 | 11.6 |
|  | Hispanic or Latino | 327 | 41.9 | 16.5 | 9.5 | 32.1 |
|  | Native Hawaiian or Other Pacific Islander | 5 | 80.0 | 20.0 | 0.0 | 0.0 |
|  | Two or More Races | 103 | 42.7 | 22.3 | 17.5 | 17.5 |
|  | White | 109 | 36.7 | 29.4 | 24.8 | 9.2 |
|  | Other/Unknown | 6 | 33.3 | 16.7 | 16.7 | 33.3 |
| Other | Gifted | 1 | 0.0 | 0.0 | 100.0 | 0.0 |
|  | IEP | 10 | 10.0 | 50.0 | 10.0 | 30.0 |
|  | Migrant | 3 | 33.3 | 33.3 | 33.3 | 0.0 |
| Primary Disability | Autism | 2 | 0.0 | 0.0 | 50.0 | 50.0 |
|  | Intellectual Disability | 2 | 0.0 | 50.0 | 0.0 | 50.0 |
|  | Other health impairment | 3 | 0.0 | 66.7 | 0.0 | 33.3 |
|  | Specific learning disability | 3 | 33.3 | 66.7 | 0.0 | 0.0 |

Table S3.9: Screener Overall Proficiency Levels - Grade 8

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 682 | 39.9 | 31.4 | 13.3 | 15.4 |
| Gender | Female | 292 | 37.7 | 35.6 | 13.7 | 13.0 |
|  | Male | 346 | 42.5 | 26.9 | 13.0 | 17.6 |
|  | Missing | 44 | 34.1 | 38.6 | 13.6 | 13.6 |
| Ethnicity | American Indian or Alaskan Native | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 106 | 31.1 | 38.7 | 26.4 | 3.8 |
|  | Black or African American | 127 | 28.3 | 48.0 | 10.2 | 13.4 |
|  | Hispanic or Latino | 232 | 48.7 | 23.3 | 9.9 | 18.1 |
|  | Native Hawaiian or Other Pacific Islander | 3 | 66.7 | 33.3 | 0.0 | 0.0 |
|  | Two or More Races | 108 | 39.8 | 21.3 | 8.3 | 30.6 |
|  | White | 98 | 40.8 | 33.7 | 18.4 | 7.1 |
|  | Other/Unknown | 7 | 57.1 | 14.3 | 0.0 | 28.6 |
| Other | Gifted | 2 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | IEP | 8 | 37.5 | 25.0 | 25.0 | 12.5 |
|  | Migrant | 3 | 66.7 | 33.3 | 0.0 | 0.0 |
| Primary Disability | Autism | 1 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | Other health impairment | 4 | 75.0 | 0.0 | 25.0 | 0.0 |
|  | Specific learning disability | 3 | 0.0 | 66.7 | 33.3 | 0.0 |

Table S3.10: Screener Overall Proficiency Levels - Grade 9

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 1,273 | 45.8 | 25.9 | 10.1 | 18.1 |
| Gender | Female | 520 | 45.4 | 26.7 | 9.8 | 18.1 |
|  | Male | 670 | 46.9 | 25.5 | 9.7 | 17.9 |
|  | Missing | 83 | 39.8 | 24.1 | 15.7 | 20.5 |
| Ethnicity | American Indian or Alaskan Native | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Asian | 150 | 32.0 | 42.0 | 24.7 | 1.3 |
|  | Black or African American | 255 | 40.4 | 38.0 | 8.6 | 12.9 |
|  | Hispanic or Latino | 518 | 56.2 | 15.4 | 6.0 | 22.4 |
|  | Native Hawaiian or Other Pacific Islander | 11 | 63.6 | 27.3 | 0.0 | 9.1 |
|  | Two or More Races | 192 | 46.9 | 15.6 | 6.8 | 30.7 |
|  | White | 120 | 33.3 | 36.7 | 17.5 | 12.5 |
|  | Other/Unknown | 26 | 15.4 | 46.2 | 19.2 | 19.2 |
| Other | IEP | 8 | 25.0 | 62.5 | 12.5 | 0.0 |
|  | Migrant | 4 | 100.0 | 0.0 | 0.0 | 0.0 |
| Primary Disability | Intellectual Disability | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Multiple disabilities | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Specific learning disability | 6 | 16.7 | 83.3 | 0.0 | 0.0 |
|  | Speech or language impairment | 1 | 0.0 | 0.0 | 100.0 | 0.0 |

Table S3.11: Screener Overall Proficiency Levels - Grade 10

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 676 | 39.2 | 36.1 | 15.1 | 9.6 |
| Gender | Female | 298 | 37.6 | 37.9 | 14.4 | 10.1 |
|  | Male | 327 | 38.8 | 36.1 | 15.0 | 10.1 |
|  | Missing | 51 | 51.0 | 25.5 | 19.6 | 3.9 |
| Ethnicity | American Indian or Alaskan Native | 2 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Asian | 108 | 28.7 | 42.6 | 25.0 | 3.7 |
|  | Black or African American | 148 | 29.7 | 48.0 | 18.9 | 3.4 |
|  | Hispanic or Latino | 212 | 50.9 | 23.6 | 8.0 | 17.5 |
|  | Native Hawaiian or Other Pacific Islander | 3 | 33.3 | 66.7 | 0.0 | 0.0 |
|  | Two or More Races | 103 | 42.7 | 35.0 | 7.8 | 14.6 |
|  | White | 86 | 37.2 | 43.0 | 18.6 | 1.2 |
|  | Other/Unknown | 14 | 21.4 | 14.3 | 42.9 | 21.4 |
| Other | IEP | 4 | 25.0 | 50.0 | 0.0 | 25.0 |
| Primary Disability | Developmental delay | 1 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | Emotional disturbance | 1 | 100.0 | 0.0 | 0.0 | 0.0 |
|  | Intellectual Disability | 1 | 0.0 | 0.0 | 0.0 | 100.0 |
|  | Other health impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 2 | 0.0 | 100.0 | 0.0 | 0.0 |

Table S3.12: Screener Overall Proficiency Levels - Grade 11

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 414 | 31.9 | 40.3 | 21.5 | 6.3 |
| Gender | Female | 198 | 34.3 | 38.4 | 21.2 | 6.1 |
|  | Male | 180 | 28.3 | 43.9 | 20.6 | 7.2 |
|  | Missing | 36 | 36.1 | 33.3 | 27.8 | 2.8 |
| Ethnicity | Asian | 73 | 17.8 | 47.9 | 31.5 | 2.7 |
|  | Black or African American | 91 | 31.9 | 52.7 | 12.1 | 3.3 |
|  | Hispanic or Latino | 143 | 47.6 | 21.7 | 17.5 | 13.3 |
|  | Native Hawaiian or Other Pacific Islander | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Two or More Races | 24 | 29.2 | 41.7 | 20.8 | 8.3 |
|  | White | 72 | 19.4 | 48.6 | 31.9 | 0.0 |
|  | Other/Unknown | 10 | 10.0 | 70.0 | 20.0 | 0.0 |
| Other | IEP | 3 | 33.3 | 33.3 | 0.0 | 33.3 |
| Primary Disability | Intellectual Disability | 2 | 50.0 | 0.0 | 0.0 | 50.0 |
|  | Other health impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 0.0 | 0.0 | 100.0 | 0.0 |

Table S3.13: Screener Overall Proficiency Levels - Grade 12

| Subgroup | Status | N | Emerging | Progressing | Proficient | Proficiency Not Demonstrated |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total |  | 249 | 22.5 | 47.4 | 22.5 | 7.6 |
| Gender | Female | 117 | 20.5 | 52.1 | 23.1 | 4.3 |
|  | Male | 116 | 23.3 | 41.4 | 23.3 | 12.1 |
|  | Missing | 16 | 31.3 | 56.3 | 12.5 | 0.0 |
| Ethnicity | Asian | 45 | 8.9 | 60.0 | 31.1 | 0.0 |
|  | Black or African American | 50 | 30.0 | 46.0 | 22.0 | 2.0 |
|  | Hispanic or Latino | 79 | 35.4 | 32.9 | 12.7 | 19.0 |
|  | Native Hawaiian or Other Pacific Islander | 2 | 0.0 | 50.0 | 50.0 | 0.0 |
|  | Two or More Races | 13 | 0.0 | 46.2 | 46.2 | 7.7 |
|  | White | 47 | 14.9 | 61.7 | 21.3 | 2.1 |
|  | Other/Unknown | 13 | 15.4 | 46.2 | 30.8 | 7.7 |
| Other | IEP | 3 | 33.3 | 66.7 | 0.0 | 0.0 |
| Primary Disability | Other health impairment | 1 | 0.0 | 100.0 | 0.0 | 0.0 |
|  | Specific learning disability | 1 | 100.0 | 0.0 | 0.0 | 0.0 |

# Section 4: Screener Assessment - Conditional Standard Error of Measurement (CSEM) 

* Domains with Exemption are excluded.

Figure S4.1: Screener Conditional Standard Error of Measurement for Kindergarten


* Domains with Exemption are excluded.

Figure S4.2: Screener Conditional Standard Error of Measurement for Grade 1


* Domains with Exemption are excluded.

Figure S4.3: Screener Conditional Standard Error of Measurement for Grade 2


* Domains with Exemption are excluded.

Figure S4.4: Screener Conditional Standard Error of Measurement for Grade 3


* Domains with Exemption are excluded.

Figure S4.5: Screener Conditional Standard Error of Measurement for Grade 4


* Domains with Exemption are excluded.

Figure S4.6: Screener Conditional Standard Error of Measurement for Grade 5


* Domains with Exemption are excluded.

Figure S4.7: Screener Conditional Standard Error of Measurement for Grade 6


* Domains with Exemption are excluded.

Figure S4.8: Screener Conditional Standard Error of Measurement for Grade 7


* Domains with Exemption are excluded.

Figure S4.9: Screener Conditional Standard Error of Measurement for Grade 8


* Domains with Exemption are excluded.

Figure S4.10: Screener Conditional Standard Error of Measurement for Grade 9


* Domains with Exemption are excluded.

Figure S4.11: Screener Conditional Standard Error of Measurement for Grade 10


* Domains with Exemption are excluded.

Figure S4.12: Screener Conditional Standard Error of Measurement for Grade 11


* Domains with Exemption are excluded.

Figure S4.13: Screener Conditional Standard Error of Measurement for Grade 12


* Domains with Exemption are excluded.


# Section 5: Student Progress from Screener to Summative - Scatter Plots of Scale Score Change 

Figure S5.1: Scatter Plot of Scale Score Change from Screener to Summative for Grade K


* Results are based on subset of students with results for both the screener and summative assessment.

Figure S5.2: Scatter Plot of Scale Score Change from Screener to Summative for Grade 1


* Results are based on subset of students with results for both the screener and summative assessment.

Figure S5.3: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 2-3


* Results are based on subset of students with results for both the screener and summative assessment.

Figure S5.4: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 4-5


* Results are based on subset of students with results for both the screener and summative assessment.

Figure S5.5: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 6-8


* Results are based on subset of students with results for both the screener and summative assessment.

Figure S5.6: Scatter Plot of Scale Score Change from Screener to Summative for Grade Band 9-12


* Results are based on subset of students with results for both the screener and summative assessment.


# Section 6: Student Progress from Screener to Summative - Comparison of Scale Scores 

Table S6.1: Comparison of Scale Scores Between Screener and Summative - Listening

| Grade/Grade Band | Test | N | Mean | SD | Min | P10 | P25 | P50 | P75 | P90 | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | Screener | 8,558 | 519 | 62 | 314 | 430 | 483 | 531 | 561 | 583 | 714 |
|  | Summative | 8,558 | 566 | 77 | 237 | 466 | 512 | 565 | 619 | 666 | 775 |
| 1 | Screener | 1,140 | 491 | 82 | 288 | 381 | 422 | 505 | 552 | 596 | 678 |
|  | Summative | 1,140 | 538 | 87 | 289 | 412 | 472 | 547 | 604 | 648 | 712 |
| 2-3 | Screener | 1,588 | 468 | 77 | 286 | 374 | 402 | 468 | 531 | 573 | 645 |
|  | Summative | 1,588 | 490 | 90 | 279 | 367 | 408 | 499 | 565 | 603 | 719 |
| 4-5 | Screener | 1,036 | 441 | 87 | 270 | 337 | 369 | 432 | 513 | 559 | 696 |
|  | Summative | 1,036 | 480 | 92 | 213 | 363 | 397 | 480 | 556 | 604 | 700 |
| 6-8 | Screener | 1,254 | 453 | 83 | 279 | 362 | 386 | 431 | 521 | 575 | 684 |
|  | Summative | 1,254 | 488 | 88 | 335 | 384 | 406 | 480 | 558 | 612 | 742 |
| 9-12 | Screener | 1,619 | 472 | 88 | 297 | 366 | 401 | 462 | 543 | 599 | 681 |
|  | Summative | 1,619 | 506 | 86 | 343 | 403 | 432 | 497 | 572 | 629 | 809 |

* Results are based on subset of students with results for both the screener and summative assessment.

Table S6.2: Comparison of Scale Scores Between Screener and Summative - Reading

| Grade/Grade Band | Test | N | Mean | SD | Min | P10 | P25 | P50 | P75 | P90 | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | Screener | 8,488 | 516 | 61 | 318 | 429 | 478 | 524 | 558 | 584 | 708 |
|  | Summative | 8,488 | 565 | 76 | 247 | 464 | 512 | 565 | 620 | 665 | 770 |
| 1 | Screener | 1,134 | 471 | 80 | 286 | 376 | 411 | 464 | 525 | 584 | 704 |
|  | Summative | 1,134 | 539 | 87 | 302 | 435 | 467 | 528 | 602 | 666 | 744 |
| 2-3 | Screener | 1,571 | 456 | 80 | 278 | 359 | 394 | 444 | 523 | 567 | 665 |
|  | Summative | 1,571 | 502 | 82 | 271 | 401 | 434 | 493 | 565 | 616 | 731 |
| 4-5 | Screener | 1,022 | 444 | 82 | 270 | 349 | 384 | 432 | 505 | 557 | 729 |
|  | Summative | 1,022 | 488 | 79 | 228 | 399 | 423 | 469 | 545 | 601 | 709 |
| 6-8 | Screener | 1,243 | 461 | 80 | 296 | 365 | 398 | 447 | 526 | 576 | 669 |
|  | Summative | 1,243 | 505 | 78 | 306 | 416 | 443 | 489 | 561 | 619 | 747 |
| 9-12 | Screener | 1,619 | 478 | 84 | 309 | 375 | 412 | 470 | 544 | 595 | 685 |
|  | Summative | 1,619 | 515 | 81 | 318 | 423 | 451 | 499 | 570 | 636 | 817 |

* Results are based on subset of students with results for both the screener and summative assessment.

Table S6.3: Comparison of Scale Scores Between Screener and Summative - Speaking

| Grade/Grade Band | Test | N | Mean | SD | Min | P10 | P25 | P50 | P75 | P90 | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | Screener | 8,336 | 513 | 78 | 339 | 390 | 464 | 519 | 566 | 608 | 711 |
|  | Summative | 8,336 | 592 | 79 | 291 | 486 | 552 | 605 | 647 | 681 | 756 |
| 1 | Screener | 1,110 | 472 | 93 | 310 | 340 | 376 | 485 | 544 | 590 | 669 |
|  | Summative | 1,110 | 553 | 101 | 285 | 388 | 498 | 577 | 624 | 664 | 736 |
| 2-3 | Screener | 1,527 | 444 | 97 | 292 | 325 | 340 | 449 | 526 | 574 | 658 |
|  | Summative | 1,527 | 505 | 104 | 267 | 346 | 420 | 525 | 589 | 628 | 730 |
| 4-5 | Screener | 1,001 | 440 | 118 | 270 | 305 | 320 | 437 | 533 | 606 | 749 |
|  | Summative | 1,001 | 487 | 104 | 237 | 338 | 397 | 506 | 573 | 609 | 723 |
| 6-8 | Screener | 1,206 | 458 | 104 | 296 | 333 | 352 | 452 | 537 | 603 | 705 |
|  | Summative | 1,206 | 513 | 96 | 313 | 381 | 434 | 530 | 593 | 629 | 738 |
| 9-12 | Screener | 1,570 | 487 | 101 | 332 | 361 | 380 | 484 | 567 | 634 | 703 |
|  | Summative | 1,570 | 529 | 86 | 329 | 401 | 469 | 540 | 595 | 631 | 770 |

* Results are based on subset of students with results for both the screener and summative assessment.

Table S6.4: Comparison of Scale Scores Between Screener and Summative - Writing

| Grade/Grade Band | Test | N | Mean | SD | Min | P10 | P25 | P50 | P75 | P90 | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | Screener | 8,474 | 481 | 55 | 347 | 414 | 445 | 477 | 511 | 550 | 684 |
|  | Summative | 8,474 | 546 | 79 | 309 | 449 | 479 | 540 | 606 | 663 | 723 |
| 1 | Screener | 1,117 | 467 | 81 | 283 | 370 | 407 | 454 | 534 | 581 | 698 |
|  | Summative | 1,117 | 529 | 96 | 290 | 392 | 446 | 540 | 598 | 654 | 733 |
| 2-3 | Screener | 1,559 | 452 | 82 | 276 | 354 | 386 | 442 | 517 | 566 | 657 |
|  | Summative | 1,559 | 496 | 89 | 272 | 379 | 417 | 497 | 565 | 616 | 733 |
| 4-5 | Screener | 1,014 | 440 | 88 | 268 | 337 | 366 | 428 | 509 | 563 | 731 |
|  | Summative | 1,014 | 473 | 93 | 221 | 354 | 387 | 472 | 547 | 597 | 717 |
| 6-8 | Screener | 1,236 | 454 | 84 | 281 | 358 | 388 | 436 | 513 | 577 | 697 |
|  | Summative | 1,236 | 482 | 94 | 303 | 351 | 399 | 489 | 554 | 606 | 757 |
| 9-12 | Screener | 1,597 | 478 | 83 | 315 | 379 | 413 | 469 | 538 | 602 | 697 |
|  | Summative | 1,597 | 496 | 89 | 326 | 368 | 422 | 503 | 566 | 611 | 808 |

* Results are based on subset of students with results for both the screener and summative assessment.

Table S6.5: Comparison of Scale Scores Between Screener and Summative - Comprehension

| Grade/Grade Band | Test | N | Mean | SD | Min | P10 | P25 | P50 | P75 | P90 | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | Screener | 8,588 | 5371 | 477 | 3978 | 4673 | 5053 | 5458 | 5744 | 5876 | 6375 |
|  | Summative | 8,588 | 5590 | 541 | 3377 | 4874 | 5208 | 5586 | 5978 | 6309 | 6865 |
| 1 | Screener | 1,147 | 5073 | 556 | 3785 | 4365 | 4637 | 5071 | 5501 | 5800 | 6387 |
|  | Summative | 1,147 | 5416 | 590 | 3759 | 4639 | 4972 | 5398 | 5832 | 6283 | 6633 |
| 2-3 | Screener | 1,593 | 4930 | 589 | 3756 | 4241 | 4428 | 4860 | 5433 | 5746 | 6439 |
|  | Summative | 1,593 | 5104 | 611 | 3598 | 4316 | 4566 | 5087 | 5592 | 5944 | 6729 |
| 4-5 | Screener | 1,042 | 4752 | 560 | 3649 | 4103 | 4305 | 4686 | 5200 | 5508 | 6421 |
|  | Summative | 1,042 | 5035 | 608 | 3298 | 4342 | 4525 | 4948 | 5508 | 5890 | 6878 |
| 6-8 | Screener | 1,263 | 4854 | 566 | 3803 | 4236 | 4407 | 4711 | 5299 | 5680 | 6476 |
|  | Summative | 1,263 | 5123 | 598 | 3986 | 4456 | 4621 | 5005 | 5559 | 6003 | 6938 |
| 9-12 | Screener | 1,636 | 4960 | 604 | 3787 | 4249 | 4476 | 4893 | 5447 | 5789 | 6524 |
|  | Summative | 1,636 | 5236 | 617 | 4051 | 4561 | 4740 | 5101 | 5628 | 6158 | 7177 |

[^20]Table S6.6: Comparison of Scale Scores Between Screener and Summative - Overall

| Grade/Grade Band | Test | N | Mean | SD | Min | P10 | P25 | P50 | P75 | P90 | Max |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| K | Screener | 8,613 | 5126 | 481 | 3646 | 4465 | 4831 | 5174 | 5452 | 5656 | 6763 |
|  | Summative | 8,613 | 5635 | 566 | 3185 | 4917 | 5248 | 5635 | 6035 | 6362 | 7178 |
| 1 | Screener | 1,150 | 4880 | 665 | 3364 | 4006 | 4322 | 4913 | 5383 | 5796 | 6629 |
|  | Summative | 1,150 | 5418 | 722 | 3406 | 4374 | 4899 | 5467 | 5948 | 6369 | 6998 |
| 2-3 | Screener | 1,601 | 4713 | 670 | 3326 | 3903 | 4110 | 4700 | 5270 | 5624 | 6350 |
|  | Summative | 1,601 | 5073 | 719 | 3326 | 4079 | 4448 | 5137 | 5644 | 5987 | 6932 |
| 4-5 | Screener | 1,050 | 4619 | 748 | 3237 | 3748 | 3970 | 4517 | 5198 | 5677 | 6891 |
|  | Summative | 1,050 | 4951 | 720 | 2892 | 4025 | 4310 | 4957 | 5562 | 5909 | 6689 |
| 6-8 | Screener | 1,272 | 4753 | 700 | 3388 | 3948 | 4154 | 4649 | 5293 | 5763 | 6606 |
|  | Summative | 1,272 | 5081 | 696 | 3594 | 4178 | 4464 | 5078 | 5636 | 6019 | 6938 |
| 9-12 | Screener | 1,655 | 4938 | 709 | 3605 | 4061 | 4350 | 4894 | 5474 | 5991 | 6638 |
|  | Summative | 1,655 | 5198 | 664 | 3696 | 4320 | 4658 | 5180 | 5716 | 6100 | 7483 |

[^21]
[^0]:    ${ }^{1}$ Section 17(A), House Bill 197, 133rd General Assembly.

[^1]:    * Domains with Exemption or Not Attempted are excluded.
    * Scale scores cannot be compared across grade bands.

[^2]:    ${ }^{2}$ ITS is CAI's item bank for ELPA21. It contains all information that relates to each item, such as item content categories at all levels, item type, maximum score points, item statistics from each administration, etc.

[^3]:    ${ }^{3}$ Ledger is an electronic system that CAI and MI use to transmit data from one vendor to the other for purposes of transmitting and reporting handscored item scores. Individual responses can be tracked at all times through Ledger before a record is reported.

[^4]:    ${ }^{4}$ QMS is CAI's Quality Monitoring System. It ensures that the information in a student record, such as item key or score point, is correct.

[^5]:    * Domains with Exemption or Not Attempted are excluded from counts, which only include tests assigned to domain performance levels 1-5.

[^6]:    ${ }^{1}$ Section 17(A), House Bill 197, 133rd General Assembly.

[^7]:    * DE-LRS (listening, reading, and speaking exempted), DE-LS (listening and speaking exempted), DE-LWS (listening, writing, and speaking exempted), DE-RS (reading and speaking exempted), DE-RWS (reading, writing, and speaking exempted), DE-S (speaking exempted), DE-WS (writing and speaking exempted).

[^8]:    Based on data from the OELPS, 2019-2020 adminisitration

[^9]:    Like all test scores, these results potentially include some error. However, they are the best available estimate of the student's English proficiency, given the student's test performance on the OELPS.

[^10]:    * Scale scores cannot be compared across grade bands.

[^11]:    Scale scores cannot be compared across grade bands.

[^12]:    * Scale scores cannot be compared across grade bands.

[^13]:    * Scale scores cannot be compared across grade bands.

[^14]:    * Domains with Exemption are excluded.
    * Level 0: Performance Not Determined.

[^15]:    * Domains with Exemption are excluded.
    * Level 0: Performance Not Determined.

[^16]:    * Domains with Exemption are excluded.
    * Level 0: Performance Not Determined.

[^17]:    * Domains with Exemption are excluded.
    * Level 0: Performance Not Determined.

[^18]:    * Domains with Exemption are excluded.
    * Level 0: Performance Not Determined.

[^19]:    * Domains with Exemption are excluded.
    * Level 0: Performance Not Determined.

[^20]:    * Results are based on subset of students with results for both the screener and summative assessment.

[^21]:    * Results are based on subset of students with results for both the screener and summative assessment.

